

Morecambe Offshore Windfarm: Generation Assets

The Applicant's Response to Secretary of State Letter and Request for Information

Document Reference: 10.1

Rev 01



Document History

Doc No	MOR001-CON-ENV-RPT-0163	Rev	01
Alt Doc No	n/a		
Document Status	Approved for Use	Doc Date	03 September 2025
PINS Doc Ref	n/a	APFP Ref	n/a

Rev	Date	Doc Status	Originator	Reviewer	Approver	Modifications
01	03 September 2025	Approved for Use	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	n/a

Contents

1	Introduction	6
2	Updates in respect of HRA matters	7
2.1	Overview	7
2.2	Response	7
3	Assessment of Alternative Solutions	13
3.1	Overview	13
3.2	Response to Question 5	14
3.3	Response to Question 6	15
3.4	Response to Question 7	17
4	Detail within the Outline Compensation Implementation and Monitoring Plan for red-throated diver	19
4.1	Overview	19
4.2	Response	19
5	Compliance with the mitigation hierarchy in respect of great black-backed gull	20
5.1	Overview	20
5.2	Response	20
6	Cumulative Effects Assessment	23
6.1	Overview	23
6.2	Response to Question 13	23
7	Wake effects	26
7.1	Overview	26
7.2	Response	26
8	Civil and military aviation and radar	32
8.1	BAE Systems Operations Limited (Warton Aerodrome) and Defence Infrastructure Organisation (DIO)	32
8.2	Other Aviation Requirements	36
9	Commercial negotiations and agreements	39
9.1	Overview	39
9.2	Response to Question 19	39
9.3	Response to Question 20	40
9.4	Response to Question 21	41

Tables

Table 3.1 Drawings updated in response to Assessment of Alternative Solutions Question 5	14
--	----

Table 3.2 Number of WTG positions available under each of the SoS buffer scenarios	18
--	----

Glossary of Acronyms

AEoI	Adverse Effect on Integrity
ATS	Air Traffic Services
CEA	Cumulative Effects Assessment
CPC	Central Processing Complex
CPP1	Central Processing Platform 1
DCO	Development Consent Order
EIA	Environmental Impact Assessment
EIST	East Irish Sea Transmission project
ExA	Examining Authority
FEED	Front End Engineering Design
GBBG	Great Black-backed Gull
HAT	Highest Astronomical Tide
HRA	Habitats Regulations Assessment
JNCC	Joint Nature Conservation Committee
LBBG	Lesser Black-backed Gull
MMMP	Marine Mammal Mitigation Protocol
MVOWFL	Moor Vannin Offshore Wind Farm Limited
NE	Natural England
NRW(A)	Natural Resources Wales (Advisory)
OCIMP	Outline Compensation Implementation and Monitoring Plan
PINS	Planning Inspectorate
PSR	Primary Surveillance Radar
RIAA	Report to Inform Appropriate Assessment
RIES	Report on the Implications for European Sites
RTD	Red-throated Diver
SAC	Special Area of Conservation
SoS	Secretary of State
SPA	Special Protection Area
TCE	The Crown Estate
UXO	Unexploded Ordnance
UWSMS	Underwater Sound Management Strategy
WTG	Wind Turbine Generator

Glossary of Unit Terms

km	kilometre
m ²	square metre
MW	megawatt
nm	nautical mile

Glossary of Terminology

Agreement for Lease (AfL)	Agreements under which seabed rights are awarded following the completion of The Crown Estate tender process.
Applicant	Morecambe Offshore Windfarm Ltd.
Application	This refers to the Applicant's application for a Development Consent Order (DCO). An application consists of a series of documents and plans which are published on the Planning Inspectorate's (PINS) website.
Generation Assets (the Project)	Generation assets associated with the Morecambe Offshore Windfarm. This is infrastructure in connection with electricity production, namely the fixed foundation wind turbine generators (WTGs), inter-array cables, offshore substation platform(s) (OSP(s)) and possible platform link cables to connect OSP(s).
The Planning Inspectorate	The agency responsible for operating the planning process for Nationally Significant Infrastructure Projects.
Windfarm site	The area within which the WTGs, inter-array cables, OSP(s) and platform link cables would be present.

1 Introduction

1. This document presents the Applicant's (Morecambe Offshore Windfarm Ltd) response to the Secretary of State's (SoS) letter and request for information issued on 21 August 2025, and to the supplementary question issued via email on 1 September 2025. The request covered topics in relation to the status of Habitats Regulations Assessment (HRA) matters, assessment of Alternative Solutions, detail within the Outline Compensation Implementation and Monitoring Plan (OCIMP) for red-throated diver, compliance with the mitigation hierarchy in respect of great black-backed gull (GBBG), Cumulative Effects Assessment (CEA), wake effects, civil and military aviation and radar and commercial negotiations and agreements.
2. The Applicant's responses to the SoS's letter are provided in the following sections of this document:
 - Updates in respect of HRA matters - **Section 2**
 - Assessment of Alternative Solutions - **Section 3** and **Appendix A: Assessment of Alternative Solutions Figures** (Document Reference 10.1.1)
 - Detail within the OCIMP for red-throated diver – **Section 4** and **Appendix B: Update to red-throated diver compensation proposals** (Document Reference 10.1.2)
 - Compliance with the mitigation hierarchy in respect of GBBG- **Section 5**
 - Cumulative Effects Assessment – **Section 6**
 - Wake effects – **Section 7**
 - Civil and military aviation and radar – **Section 8**
 - Commercial Negotiations and agreements – **Section 9** and **Appendix C: Appendix C: The Applicant's Response to Question 20 - Harbour Energy - Agreed Protective Provisions.**

2 Updates in respect of HRA matters

2.1 Overview

3. Paragraph 3 of the Secretary of State's letter is in relation to HRA matters and is provided below for reference:

*3. Noting that further HRA information was submitted by the Appropriate Nature Conservation Bodies and the Applicant at Deadline 6 following publication of the Report on the Implications for European Sites, the Secretary of State invites the **Applicant**, **NE**, **NRW(A)**, and **JNCC** to provide any final comments on that further information.*

4. On 1 September 2025, an email from the Planning Inspectorate Case Officer clarified this request as follows:

The request outlined in paragraph 3 of the Information Request pertains to additional comments on the RIES, which were made available at Deadline 6. Interested Parties (IPs) are invited to provide their views on these comments which are referred to below:

Natural England: REP6-051

Natural Resources Wales: REP6-053

Royal Society for the Protection of Birds: REP6-054

The Crown Estate: REP6-068

2.2 Response

5. The Applicant's responses in relation to HRA matters is separated below into comments on each of the Appropriate Nature Conservation Bodies' submissions provided at Deadline 6. The Applicant does not consider that these Deadline 6 submissions change its position as set out in its Summary and Signposting Document submitted at Deadline 6 (REP6-040), but individual comments are included below.

2.2.1 The JNCC

6. The JNCC submitted Comments on the Report on Implications for European Sites (RIES) at Deadline 6 (REP6-044). The Applicant welcomes the JNCC's confirmation that there would be no Adverse Effect on Integrity (AEoI) as a result of the Project for any Special Protection Areas (SPAs) within their jurisdiction and that all ornithology matters have been sufficiently addressed through written submissions over the examination period. The Applicant also welcomes the JNCC's confirmation that outstanding issues on marine mammal assessments for North Anglesey Marine Special Area of Conservation (SAC) have been addressed to their satisfaction.

7. With regard to the JNCC's comments on insufficient compliance with the January 2025 update to underwater noise guidance¹, the Applicant considers that relevant amendments to the application documents were submitted prior to the end of examination to address the points raised by the JNCC in their closing statement. Specifically, the Applicant provided further updates to the Outline Underwater Sound Management Strategy (UWSMS) at Deadline 5a (REP5a-042) and the Draft Marine Mammal Mitigation Protocol (MMMP) at Deadline 6 (REP6-019) confirming that 'best endeavours' would be used to reduce underwater noise and primary and/or secondary noise reduction methods would be applied for all driven piles if required for foundation installation. Should the SoS consider it necessary, a condition has been added during examination to the Draft Development Consent Order (DCO) (REP6-002) (Schedule 6, Condition 20(2)) requiring that where piled foundations are used, the UWSMS must provide '*details of the noise reduction measures or noise abatement system (or both) that will be utilised to manage sound*' in compliance with the January 2025 guidance, as detailed in The Applicant's Summary and Signposting Document (REP6-040) (Table 2.3).
8. The Applicant has also committed to complying with the updated guidance on low order UXO clearance (if required) to be used as the default clearance method in the revised MMMP and notes that both Natural England (REP6-052) and Natural Resources Wales (Advisory) (NRW(A)) (REP6-053) were satisfied that compliance with the updated January 2025 underwater noise guidance was closed out with the DCO, UWSMS and MMMP amendments.

2.2.2 Natural England

9. The Applicant has reviewed Natural England (NE)'s cover letter including closing statements for topics with unresolved issues (REP6-047). A response to the SoS questions on the potential impacts from the Project on Red-throated Diver (RTD) is included in **Section 3** and **Section 4**, and on Great Black-backed Gull (GBBG) in **Section 5**.
10. In addition to the responses in these sections, in relation to ornithology, the Applicant notes that NE's conclusion that a buffer of less than 10km distance from the original SPA boundary would represent no AEoI for disturbance impacts on RTD in Liverpool Bay SPA reinforces the Applicant's position presented in the Offshore Ornithology Technical Note 3 (Red-Throated Diver at Liverpool Bay SPA Update Assessment) (Section 2.4, REP1-082) which concluded no AEoI for this feature given there would be a diminishing effect on RTD as distance from the windfarm increased (Section 3, REP1-082).

¹ <https://data.jncc.gov.uk/data/e1d38ce8-9bc6-4fb5-b867-f7f595caa25a/jncc-ne-cefas-noise-abatement-joint-position.pdf>

11. The Applicant has no further comment to make on NE's closing position on offshore ornithology (REP6-047) (although further comment is made below on compensation matters).
12. Outstanding matters relating to benthic and physical processes and amendments to OSPAR requirements refer to potential decommissioning activities, which the Applicant has stated would be considered post-consent on submission of a Decommissioning Plan following detailed Project design, as confirmed in its Summary and Signposting Document (REP6-040) (Table 2.1). The Applicant has no further comments to make on these matters.
13. In terms of monitoring, the Applicant updated the MMMP (REP6-019) at Deadline 6 to include a commitment to record observations from marine mammal observers and passive acoustic monitor detections (to record observed responses of marine mammals to active noise sources where possible), environmental conditions, descriptions of any marine mammal sightings and any actions taken during any piling or UXO clearance activities and trusts this is sufficient to address NE's outstanding concerns on marine mammal monitoring. Construction and operation ports have not been selected at this point, however commitments have been made by the Applicant to address disturbance in the Outline Vessel Traffic Management Plan (REP5a-031), which is required to be approved post-consent once construction and operation ports have been selected, in consultation with relevant stakeholders including SNCBs.
14. Any temporal measures required to avoid concurrent piling and/or UXO clearance with other projects would depend on the detailed UXO clearance and construction programmes of both Morecambe Generation and other relevant projects. The Applicant considers that a post-consent UXO marine licence application, if necessary, together with the required UWSMS and MMMPs which would also need to be submitted for approval post-consent, provide appropriate mechanisms to consider any concurrent activities with other projects that may require further mitigation. It is not anticipated that further coordination with other projects to schedule activities is likely to be required or that it would be proportional to the Project's potential effects (REP6-040, Table 2.3).
15. The Applicant welcomes NE's conclusion that significant impacts from the Project on designated bat features in English sites in the National Site Network can be ruled out.
16. The Applicant has reviewed NE's Appendix B13 to Natural England's Deadline 6 submission providing Natural England's detailed comments on Offshore Ornithology (REP6-048), noting that responses to SoS questions on RTD Derogation and 'without prejudice' compensation are provided in **Section 3** and **Section 4**. With regard to an appropriate quantum for the Lesser Black-backed Gull (LBBG) 'without prejudice' compensation case (REP5a-012), the Applicant does not agree with NE's target level as detailed in its response to

Interested Parties and Comments on ExQ3s (REP6-038, pp25-27), however welcomes that the area of scrub clearance proposed for Steep Holm would provide a substantially more than sufficient quantum of compensation to NE's satisfaction. The Applicant has no further comment on REP6-048.

17. The Applicant has reviewed Appendix K to NE's Deadline 6 submission, NE's Principal Areas of Disagreement Summary Statement (REP6-050). The Applicant maintains a disagreement with NE on the conclusions of AEol resulting from the Project's potential impacts on both RTD in Liverpool Bay SPA and LBBG in Morecambe Bay and Duddon Estuary and Ribble and Alt Estuaries SPAs, however NE's position is welcomed that the scale of the proposed 'without prejudice' compensation measures for both RTD and LBBG would be sufficient should the SoS determine that compensation is required (NE Refs P4 and P5 (REP6-050)). The Applicant appreciates that all further matters detailed in REP6-050 have been resolved.
18. The Applicant has reviewed NE's Appendix L to NE's Deadline 6 submission, NE's responses to the Examining Authority's (ExA's) RIES (REP6-051), noting the maintained disagreement between NE and the Applicant on conclusions of potential AEol on RTD and LBBG. The Applicant is grateful for NE's comments on the RIES and, excepting the response below on potential RTD impacts, has no further comment to make on REP6-051.
19. The Applicant has reviewed NE's Deadline 6 Risks and Issues Log (REP6-052). Matters relating to disagreement on the conclusions of AEol for RTD and LBBG, marine mammal monitoring and the provision of an outline Decommissioning Plan have been discussed above and discussion on the issue of buffers to mitigate impacts on RTD follows in **Section 3**. Potential significant EIA impacts upon GBBG are expanded upon in **Section 5**. An update on progress with the RTD compensation measure is presented in **Section 4**. The Applicant has no further comment on the Risks and Issues Log (REP6-052) for the DCO, Ornithology, Fish and Shellfish Ecology.
20. The Applicant notes NE's closing comments on seabed preparation and the removability of scour and cable protection. Detailed plans for these matters are conditioned in the draft DCO for approval post-consent (Construction Method Statement – Condition 9(1)(d), Schedule 6). The Applicant has no further comment on NE's closing Risk and Issues Log (REP6-052) for Marine Mammals, Physical Processes, Benthic Ecology or Bats.

2.2.3 Natural Resources Wales (Advisory)

21. The Applicant has reviewed NRW(A)'s Deadline 6 Submission including Responses to the RIES (REP6-053). The Applicant thanks NRW(A) for their input during the examination process and is grateful that all outstanding issues were resolved by the end of examination, as confirmed in the statement of common ground (REP6-036).

2.2.4 Royal Society for the Protection of Birds (RSPB)

22. The Applicant has reviewed RSPB's Responses to the RIES (REP6-054). The Applicant notes that the matters raised by RSPB in its response have been addressed within the Statement of Common Ground (SOCG) between the Applicant and RSPB (REP5a-033). As noted within the SOCG, the principal areas of disagreement relate primarily to industry-wide concerns held by the RSPB, rather than Project-specific matters.
23. In respect of the Manx shearwater feature of the Irish Sea Front SPA, the Applicant welcomes confirmation that RSPB agrees that there would be no AEoI. For other relevant SPAs where Manx shearwater is a qualifying feature, the Applicant does not agree with RSPB's position that AEoI cannot be ruled out. Justification for the Applicant's position is set out in the response to Relevant Representations (PD1-011). In summary, the reasons for this are:
- There is no risk that baseline surveys have substantially underestimated the nighttime densities of Manx shearwater that occur at the windfarm site. This is because the displacement assessment is based on seasonal peak mean values, and it would only be the case that this would risk underestimating nighttime densities if these were likely to be substantially higher than during the day. This is extremely unlikely as the windfarm site is distant from any breeding colonies, and nighttime concentrations (i.e. exceeding daytime densities) of Manx shearwater are only likely to occur close to breeding sites.
 - Whilst the Applicant recognises that there is the potential that lighting might affect Manx shearwater behaviour, there is little evidence to indicate that this would significantly affect collision risk. Available evidence indicates that effects are most likely for fledgling birds close to nesting colonies, and also from bright white lights (such as those from a lighthouse). Neither factor would be applicable to the Project.
24. In respect of GBBG at Isles of Scilly SPA, the Applicant maintains its position, as set out in the Report to Inform Appropriate Assessment (RIAA) (REP5a-009). The very low predicted mortality apportioned to this SPA (1.09 birds annually), representing a 0.08% increase in background mortality, is considered to be below a threshold that would contribute to in-combination effects.
25. The Applicant notes that NRW(A) has agreed with the Applicant's conclusions in respect of all Welsh SPAs where Manx shearwater is a qualifying feature, i.e. that there would be no AEoI, either for the Project alone or in-combination. NRW(A) has also confirmed at Deadline 6 (REP6-053) that it is content that survey data is appropriate to inform the assessment, and that '*the collision risk model is as robust as it currently can be*'. Similarly, Natural England has confirmed that it agrees with the conclusion of no AEoI (alone and in-combination) for the GBBG feature of the Isles of Scilly SPA. NatureScot has

also agreed with the Applicant's conclusions of no AEol on Manx shearwater both for the Project alone and in-combination on the Rum and St Kilda SPAs (REP2-039). The Applicant highlights that the same conclusions were agreed by the Secretary of State in respect of the Mona and Morgan projects, based on comparable in-combination effects that included the Project. There is no reason, therefore, why a different conclusion would be reached for the Project.

2.2.5 The Crown Estate

26. The Applicant has reviewed The Crown Estate's (TCE) Deadline 6 Response to the RIES (REP6-068) which confirms the capacity of the project is 480MW. The Applicant thanks TCE for its engagement throughout the examination process.

3 Assessment of Alternative Solutions

3.1 Overview

27. Paragraphs 4-7 of the Secretary of State's letter are in relation to Assessment of Alternatives associated with potential buffers and the consequential impacts on Project layouts. These are provided below for reference:

4. *The Secretary of State notes that the Applicant has provided plans illustrating the potential impact and effect that different buffers from the original Liverpool Bay SPA boundary, 'Shell Flat', and the oil and gas platforms would have on the potential layout and number of wind turbine generators ("WTGs") that could be accommodated within the Order Limits [REP5a-057]. NE advised [REP6-051] that the most precautionary approach to avoiding an adverse effect on integrity ("AEol") of the Liverpool Bay SPA would be a 10km buffer from 'Shell Flat', but also acknowledged that AEol could be ruled out under a 7.5km buffer from the original SPA boundary.*

5. *The **Applicant** is requested to provide an updated version of the document titled 'The Applicant's Response to ExA's Written Questions 3GEN2 and 3GEN3' [REP5a-057]. The revised submission should include an explanation of the colour keys used in Figures 2.1 and 2.2 of REP5a-057 or, if the current keys are inaccurate, provide updated versions of these figures with corrected colour keys. Additionally, the Applicant should provide figures with nominal layouts that reflect 1.9nm aviation enduring buffer zones from both the CPC and Calder platforms (as defined in the Applicant's draft DCO [REP6-002]).*

6. *The **Applicant** is invited to respond to NE's representation [REP6-051] and clarify whether the implementation of either of the proposed buffer scenarios would achieve the same overall objectives as the original scheme, and whether such scenarios are financially, legally, and technically feasible. The Applicant should also confirm whether the adoption of any buffer scenario would alter the conclusions of the EIA and the HRA.*

7. *The **Applicant** is asked to comment on the potential for relocation of WTGs from the eastern part of the site, should the SoS wish to apply either (i) the 7.5km SPA boundary buffer, or (ii) the 10km Shell Flat buffer. In these scenarios, could WTGs be located in the west of the site to replace WTGs moved from the east of the site to accommodate SPA buffers? The Applicant is asked to comment on the feasibility of relocating WTGs to the west of the site in scenarios (i) and (ii), in the event that there is either (a) an enduring aviation buffer of 1.5nm around both the CPC and Calder platforms or (b) an enduring aviation buffer of 1.9nm around both platforms. The Applicant should also confirm whether the adoption of any of the relocation scenarios - (i)(a), (i)(b), (ii)(a) or (ii)(b) - would alter the conclusions of the EIA and the HRA.*

3.2 Response to Question 5

28. The following drawings as detailed in **Table 3.1** have been produced and are included within **Appendix A** to this response document. An explanation of the changes is provided below:

- The colours used to denote the buffers around the original boundary of the Liverpool Bay SPA have been changed for clarity (**Figures 1 and 2**).
- A 1.9nm aviation enduring buffer zone around both the CPC and Calder platforms has been added to all drawings (although note response to Question 20 below and Appendix C containing Protective Provisions agreed with Harbour Energy).
- Two new drawings have been produced (**Figure 3 & Figure 6**); these show the indicative layout for the WTGs at the current stage of the design process, which has developed since the close of the examination. This layout shows 34 locations for WTGs and a substation. Preliminary site investigation work undertaken as part of the Front End Engineering & Design (FEED) process has indicated the presence of potentially challenging ground conditions across parts of the site, which might preclude the preferred installation method (piling) of WTGs in some locations, and these locations are shown in amber. Locations with favourable ground conditions with a high certainty of being able to install WTGs through piling are shown in green. Locations without site investigation data are shown in grey. In total, the current indicative layout shows 19 green locations, 6 amber locations, and 9 grey locations.
- It is emphasised that the design and engineering layout work is ongoing and cannot be finalised at this time. As discussed in response to Question 6 below, the final design will depend on further information including the turbine model and capacity and further geotechnical investigations. As such the project design envelope applied for (30 – 35 turbines) remains appropriate.

Table 3.1 Drawings updated in response to Assessment of Alternative Solutions Question 5

Drawing number	Original Examination Reference	Description of Updates
Figure 1	REP5a-057 Figure 2.1	Colours used for buffers around the SPA boundary revised; addition of 1.9nm buffer around Calder and CPP1
Figure 2	REP5a-057 Figure 2.2	Colours used for buffers around the SPA boundary revised; addition of 1.9nm buffer around Calder and CPP1
Figure 3	New drawing	Drawing based on Figure 1 with current indicative layout for WTGs

Drawing number	Original Examination Reference	Description of Updates
Figure 4	REP5a-057 Figure 2.3	Addition of 1.9nm buffer around Calder and CPP1
Figure 5	REP5a-057 Figure 2.4	Addition of 1.9nm buffer around Calder and CPP1
Figure 6	New drawing	Drawing based on Figure 4 with current indicative layout for WTGs

3.3 Response to Question 6

29. The specific question of whether buffer zones to provide a separation distance (from 7km to up to 10km) for RTD from the original Liverpool Bay SPA would present a viable mitigation measure was addressed in the Applicant's Response to ExA's Written Questions 3GEN2 and 3GEN3 (REP5a-057).
30. The response to 3GEN2 and 3GEN3 justified why any additional buffer (beyond the current 6.5km) for RTD is not an alternative solution in terms of the HRA 'no alternative solutions' test. A notional layout of 35 turbines (the maximum applied for) 'fills up' the space within the site (see **Figure 2**). This response took into account the other offshore constraints typical of similar locations in UK waters, such as buffer areas (aviation at 1.5nm, marine, pipeline and cable), archaeological exclusion zones, subsea wells, turbine spacing minima, and compliance with the requirements of MGN654 and its Annexes (including lines of orientation). **Figure 4** supported similar conclusions in relation to any additional buffer over 9km from Shell Flat.
31. Detailed design work on the project is progressing, although as is common with offshore wind projects at the pre-consent stage, a final decision on the turbine model (and consequently the turbine capacity) has not been made. This is entirely appropriate at this stage (see National Policy Statement (NPS) EN-3, para. 2.8.74) so as not to compromise efficiency by prematurely committing to turbine technology which may be out of date before installation. Such an approach is also supported by the Government's position that all offshore wind developments are likely to need to maximise their capacity within the technological, environmental, and other constraints of the development (NPS EN-3, para. 2.8.2). The final number and layout of turbines to achieve the project objective to generate 480MW will be dependent on the turbine and its capacity (see para. 16 of REP5a-057).
32. The additional figures provided in response to Question 5 (**Figure 3** and **Figure 6**) show the indicative layout as at the current stage of the design process. It can be seen that the 34 locations still fill up the site boundary, so it still cannot be concluded with certainty that the turbine locations within the NE proposed buffers will not be needed. As noted in the Applicant's Response to ExA's Written Questions 3GEN2 and 3GEN3 (para. 12 of REP5a-057), the majority of offshore

wind farms in the UK have encountered constraints post-consent that necessitate further refinements to the project layout and design, so it is prudent to retain spare locations in the layout to manage this risk even if turbine capacity dictates that less than the maximum possible number of WTGs are required.

33. Although the buffers proposed by Natural England at Deadline 6 are relatively small compared to their previous proposals, it does not necessarily mean their impact on the scheme objectives will be similarly small. Furthermore, the Applicant's position remains that there would be no appreciable benefit from these buffers in any event due to the diminishing impact on RTD as distance from the windfarm increased (REP1-082) - see the Secretary of State (SoS)'s conclusions² to TCE's Round 4 Habitats Regulations Assessment (HRA; 2022), which stated:

*"When applying a 10 km buffer around the Preferred Projects, as advised by Natural England.... The densities of red-throated diver in the area of overlap (both the original and updated SPA boundaries) are below the threshold used to identify the SPA boundary based on diver density alone (Webb et al., 2006). This indicates that the area of overlap (both the original and updated SPA boundaries) is also not important for red-throated diver in the context of the SPA designation."*³

34. The direct consequence of the Natural England proposed buffer of 7.5km would be the loss of up to four turbine locations. Whilst the site is already subject to a number of manageable technical and environmental constraints, the ability to maximise the remaining site is critical to achieving the project objectives. In other words, the Natural England proposed buffers would place in jeopardy the full realisation of the project objective of 480MW. With a fully maximised layout (as would be the case with the maximum design scenario of 35 turbines and the current indicative layout of 34 turbines), it is not technically feasible to regain these lost positions without an extension to the site boundary elsewhere, which is considered not to be viable either legally or financially (see para. 26 of REP5a-057).
35. Therefore the Applicant's position remains that, if the SoS concludes an AEol cannot be ruled out, he can safely conclude that imposing either of the NE proposed buffer scenarios risks not achieving the same overall objectives as the original scheme. He can furthermore safely conclude that accommodating these buffer scenarios (taking account that additional seabed may be required to offset lost turbine locations) is not technically, legally or financially feasible. The NE

² The SoS, in their letter to TCE, confirmed that they agreed with the conclusions of the Round 4 HRA; this letter is provided as Appendix 1: The Crown Estate Letter from the Secretary of State on Plan Level HRA to (REP4-054).

³ Additional information to support assessment of Red-throated Diver feature at Liverpool Bay SPA - Revision 01 (Volume 9) (REP4-054)

proposed buffers are not therefore a feasible alternative solution in terms of the HRA 'no alternative solutions' test.

36. In terms of the conclusions of the EIA and the HRA, the Applicant's clear primary position remains that there would be no significant effect (EIA) and no AEoI (HRA) in relation to RTD and the Liverpool Bay SPA. This would not be altered by the adoption of either buffer scenario.
37. The Applicant would finally note – strictly without prejudice to the foregoing – that of the two buffer scenarios (7.5km from the original Liverpool Bay SPA or 10km from Shell Flat), the 10km from Shell Flat presents the lower risk of the two on the project's viability, and NE has advised (as set out in Question 4 above) that it is the most precautionary.

3.4 Response to Question 7

38. The Applicant has provided responses above to Question 5 and Question 6 as to why, in order to achieve the project's objectives, it is important to retain the maximum design flexibility in terms of available space for the installation of WTGs. Further consideration is given here to the proposal to relocate or 'swap' positions on one side of the site for alternative positions on the opposite side of the site.
39. **Figures 3 and 6** show the current indicative layout, which has been developed since the end of the examination as detailed design and engineering work continues. There is a total of four WTG locations within the 7.5km SPA boundary buffer (**Figure 3**), and either one or two locations within the 10km Shell Flat buffer (depending on whether or not the WTG blade tips would be allowed to 'over sail' the buffer) (**Figure 6**). However, based on the indicative layout there are already three turbines located to the west of the site within 1.9nm of the Calder platform, and one to the north of the site within 1.9nm of CPP1. As explained in response to Question 6, losing turbine locations within the proposed Natural England buffers would mean that there are only 30 positions available in total for the installation of turbines and therefore there would not be space for the full maximum design scenario or the full 34 turbine current indicative layout. Even if turbine capacity dictated that only 30 positions were needed then the project would still be at risk because there are no 'spare' locations should additional constraints be identified.
40. As set out in response to Question 5 above, an initial programme of site investigation has been carried out in support of the FEED, and this indicates that those positions on the east of the site are among the best in terms of ground conditions, with a higher certainty of successful piled foundation installation in this area. The conditions in the south of the site are less favourable, with the presence of layers of mudstone which introduces some uncertainty of successful piled foundation installation. Some areas to the west and south-west of the site have not been investigated, and therefore have the highest uncertainty of success, but to add further complexity to the balancing of the competing design

considerations, the locations in the west of the site are among the best in terms of energy yield, benefiting from the best wind resources with the prevailing wind from the south-west.

41. In conclusion, while it would be possible, in a final design scenario where the project consisted of 30 WTGs, to swap positions on the east of the site for those on the west, it does not constitute a viable alternative solution in terms of the HRA 'no alternative solutions' test. This would certainly leave the project unable to build out to its maximum design scenario (35 WTG), and, depending on the suitability of the ground conditions, also unable to find sufficient locations for 30 WTGs, and place at risk the achievement of the project objectives (for the reasons set out in response to Question 6).
42. The implications, in terms of number of WTG positions available for the Applicant's current indicative layout, for the four buffer scenarios as proposed by the SoS are shown in **Table 3.2**.

Table 3.2 Number of WTG positions available under each of the SoS buffer scenarios

SoS Scenario	Description	Number WTG Positions
(i) (a)	7.5km buffer around SPA; 1.5nm enduring aviation buffer	30
(i) (b)	10km buffer around shell flat; 1.5nm enduring aviation buffer	32
(ii) (a)	7.5km buffer around SPA; 1.9nm enduring aviation buffer	26
(ii) (b)	10km buffer around shell flat; 1.9nm enduring aviation buffer	28

43. In response to the request to "confirm whether the adoption of any of the relocation scenarios - (i)(a), (i)(b), (ii)(a) or (ii)(b) - would alter the conclusions of the EIA and the HRA" the Applicant reiterates the conclusions in paragraph 36 above.

4 Detail within the Outline Compensation Implementation and Monitoring Plan for red-throated diver

4.1 Overview

44. Paragraphs 8 and 9 of the SoS's letter are in relation to detail within the Outline Compensation Implementation and Monitoring Plan (OCIMP) (REP6-048) and are provided below for reference:

8. The Secretary of State notes that NE [REP6-048] has outstanding concerns around the sufficiency of the Outline Compensation Implementation and Monitoring Plan ("oCIMP") for red-throated diver ("RTD").

*9. The **Applicant** is requested to provide further detail on the shortlisted locations proposed for the primary RTD compensation measures, along with the supporting rationale for site selection. This should include:*

- *Explanation of how each site was assessed for suitability, particularly in relation to known RTD breeding success and habitat characteristics;*
- *An update on any additional landowner support obtained, and clarification on whether the waterbodies for which support has been secured are considered optimal for the proposed measures. If not, please outline what further steps are being taken to refine site selection.*
- *An evaluation of risks associated with the proposed sites, including:*
 - *The potential for drawing RTDs away from designated SPAs into areas without statutory protection;*
 - *Any potential adverse outcomes arising from inappropriate habitat management interventions.*

4.2 Response

45. The Applicant's response in relation to the request for further detail on the proposed 'without prejudice' compensation measure for RTD is included in **Appendix B** to this document. The Applicant would like to reiterate that, due to the small contribution of the Project to in-combination impacts on RTD in Liverpool Bay SPA, as set out in the RIAA (REP5a-009), Offshore Ornithology Technical Note 3 (Red-Throated Diver at Liverpool Bay SPA Update Assessment) (REP1-082) and Additional information to support assessment of Red-throated Diver feature at Liverpool Bay SPA (REP4-054), it disagrees with NE that there would be an AEol for RTD in Liverpool Bay SPA in combination with other plans or projects. The Applicant considers that these documents present scientifically robust evidence to support its position.

5 Compliance with the mitigation hierarchy in respect of great black-backed gull

5.1 Overview

46. Paragraphs 10-12 of the SoS's letter are in relation to the mitigation hierarchy in respect of great black-backed gull (GBBG) and are provided below for reference:

10. The Secretary of State notes that the Applicant concluded there would be a significant residual cumulative effect at the EIA level on great black-backed gull ("GBBG") due to collision risk, as set out in Environmental Statement Chapter 12: Offshore Ornithology [REP6-009]. NE [REP5a-071] agreed with this conclusion and acknowledged that the Applicant had exhausted all feasible mitigation options.

11. The Secretary of State further notes that NE [REP5a-069] observed that some benefits to GBBG may arise at Steep Holm if the Applicant proceeds with its proposed compensatory measures for lesser black-backed gull at that location.

12. In light of this, and noting NPS EN-1 paragraph 4.2.12, the Secretary of State invites the Applicant to demonstrate how the mitigation hierarchy has been applied in relation to the residual impacts on GBBG. In addition, the Applicant should also provide draft without prejudice wording for a requirement to secure the provision of compensation.

5.2 Response

47. Under the Infrastructure Planning (Environmental Impact Assessment) Regulations (2017), Environmental Impact Assessments are required to include 'a description of any features of the proposed development, or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment'⁴. This describes the mitigation hierarchy that should be applied to likely significant adverse effects from a proposed development under the EIA Regulations. This also aligns with paragraphs 4.2.11 and 4.2.12 of NPS EN-1.
48. The Project sits within a defined Crown Estate Agreement for Lease area in the eastern Irish Sea and in baseline surveys, GBBG were recorded across the site in low numbers in all seasons (Chapter 12 Offshore Ornithology (REP6-009)). It would not therefore be possible to avoid or prevent impacts upon GBBG in developing an offshore windfarm at the Project's proposed location.
49. At PEIR, the Project had proposed an air gap above Highest Astronomical Tide (HAT) of 22 metres. Following SNCB advice, the air gap was increased

⁴ <https://www.legislation.gov.uk/uksi/2017/571/regulation/18/made?view=plain> <https://www.legislation.gov.uk/uksi/2017/572>

in the DCO application to 25 metres above HAT to reduce the potential for collision risk impacts on sensitive ornithological features, including GBBG. In response to NE's Relevant Representation (RR-061), the Applicant produced an Offshore Ornithology Technical Note (EIA) to examine the potential effects of further increases in blade tip height above HAT (REP3-056) as additional mitigation. As stated in paragraph 10 of the SoS's letter, NE accepted the conclusion that, due to the very small contribution of the Project to the significant adverse cumulative effect, further increases in blade height above HAT would make no meaningful difference to the cumulative mortality of GBBG and all feasible mitigation options had been exhausted.

50. The Project's contribution to cumulative GBBG mortality has been calculated using collision risk modelling to amount to 1.75 birds per annum (representing 1.1% of the total cumulative effect) (Chapter 12 Offshore Ornithology (REP6-009), Table 12.80 and paragraph 12.467). By comparison, the recently consented Mona Offshore Windfarm would contribute 4.75 birds per annum to the cumulative GBBG collision risk impacts (Table 12.80), however Mona Offshore Windfarm was not required to compensate for its larger contribution to the predicted annual mortality for GBBG. Using a different assessment approach accepted by the relevant SNCBs, Mona Offshore Windfarm was able to conclude a minor adverse cumulative collision risk effect on GBBG in EIA terms⁵.
51. The Project considers that, given its very small contribution to the likely significant cumulative adverse effect from collusion risk on GBBG, offsetting or compensating for the modelled mortality of 1.75 GBBG per year would not be proportionate to the effect from the Project alone.
52. Notwithstanding this, the Applicant would suggest the following amendment to Article 18 (Compensation measures) on a without prejudice basis should the Secretary of State consider it necessary:

“Compensation measures

18.—(1) Schedule 7 (compensation measures) has effect.

(2) If before the coming into force of this Order the undertaker or any other person has taken any steps that were intended to be steps towards compliance with any provision of Schedule 7, those steps may be taken into account for the purpose of determining compliance with that provision if they would have been valid steps for that purpose had they been taken after this Order came into force.

(3) In carrying out any activity pursuant to Part 1 (Compensation measures: Morecambe Bay and Duddon Estuary Special Protection Area and Ribble and Alt Estuaries Special Protection Area) of Schedule 7, the undertaker

⁵ [https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010137-002060-F2.5_Mona_ES_Offshore%20Ornithology%20F04%20\(Clean\).pdf](https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010137-002060-F2.5_Mona_ES_Offshore%20Ornithology%20F04%20(Clean).pdf)

must consider the applicability of that activity to great black-backed gull and seek to, as far as possible, maximise the benefit of such activity to great black-backed gull."

6 Cumulative Effects Assessment

6.1 Overview

53. Paragraph 13 of the SoS's letter is in relation to the mitigation hierarchy in respect of CEA and is provided below for reference:

*13. The Secretary of State notes that the application for Marine Infrastructure Consent for the Mooir Vannin Generation Project was due to be submitted in July 2025. The Secretary of State invites the **Isle of Man Government** and **Moor Vannin Offshore Wind Farm Limited** to confirm whether any application has been made, and when any further environmental information relevant to the application may be made available. If further information is available now, the **Applicant** is requested to update the Cumulative Effects Assessment and In-Combination Assessment accordingly.*

6.2 Response to Question 13

54. On 03 July 2025⁶, Moor Vannin Offshore Wind Farm Limited (MVOWFL) confirmed that, following submission of the Application for Marine Infrastructure Consent to the Department of Infrastructure on 12 March 2025, they were informed that updates to the Marine Infrastructure Regulations 2024 would be required to accept the Application. MVOWFL advised that it was agreed that they could withdraw their application, which it formally did on 10 June 2025, and resubmit the application in late July 2025 once the amendments to the Regulations are in force.
55. Prior to that confirmation, on 02 July 2025⁷, the Isle of Man Government confirmed that amendments to the Marine Infrastructure Management Consenting Regulations would be made and that the intention was that this regulation will be laid before the July 2025 sitting of Tynwald.
56. On 22 August 2025, the Applicant was informed by the Isle of Man Government that while the Moor Vannin application had been resubmitted it was still under consideration for acceptance and the Applicant would be informed of any changes.
57. The Moor Vannin application was accepted by the Isle of Man Government, and the application documents made publicly available, on 26 August 2025. There has therefore been insufficient time to consider the substantial volume of application documents ahead of the deadline for responding to the SoS. It is also considered that at this stage in the process for determining the Morecambe application, there would be very limited time for consultees (and the SoS) to engage meaningfully with any new cumulative assessment submitted. Setting a 'cut-off' date for the continuous update of cumulative environmental assessment, to allow decisions on projects at a more advanced

⁶ [EN010136-001125-EN010136 -Response to RFI for Moor Vannin\(1013532970.1\).pdf](#)

⁷ [Microsoft Outlook - Memo Style](#)

stage to be made, is recognised in the government's guidance "*Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment*"⁸.

58. The Applicant notes that given how much further forwards the Morecambe project is (the Mooir Vannin application is well over a year behind Morecambe), there is no risk of an assessment gap. The Mooir Vannin project has the full details of the Morecambe project, including a full EIA and Report to Inform Appropriate Assessment (and the same for Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Farm), so is in a position to carry out a full cumulative effects assessment. There is no risk of cumulative effects not being identified and assessed, and then considered in the Mooir Vannin decision.
59. The Applicant also notes that the approach for cumulative effects for the Mooir Vannin project is based upon the Planning Inspectorate (PINS) advice from '*Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment*' (PINS, 2024), which aligns with the approach undertaken for the Morecambe Offshore Windfarm project. This ensures a consistent methodology has been followed for both projects.
60. The following topics in the Mooir Vannin application screened Morecambe out of the CEA as there are no pathways for effect:
- Physical processes
 - Marine Water and Sediment Quality
 - Benthic Subtidal and Intertidal Ecology
 - Archaeology and Cultural Heritage
 - Other Marine Users and Activities
 - Onshore Impact Assessment (all topics)
61. The Morecambe project was screened into the CEA for the following topics, demonstrating that there is no risk of an assessment gap:
- Offshore and intertidal ornithology
 - Marine mammals
 - Fish and fisheries (including commercial fisheries)
 - Shipping and navigation
 - Seascape, landscape and visual
 - Military and civil aviation
 - Socio-economics and tourism.
62. Separately, on 14 August 2025, the Scoping Report for the East Irish Sea Transmission (EIST) project was submitted to the Planning Inspectorate⁹. This

⁸ [Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment - GOV.UK](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/100009/EN0210008-000009-EN0210008%20East%20Irish%20Sea%20Transmission%20Project%20Scoping%20Report.pdf)

⁹ <https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN0210008-000009-EN0210008%20East%20Irish%20Sea%20Transmission%20Project%20Scoping%20Report.pdf>

project is intended to enable renewable energy generated by the MVOWF to be exported to the UK via transmission cables.

63. The EIST project scoping boundary passes approximately 3km to the east of the Project at its closest point with no physical/direct overlap with the Order Limits. There is an overlap with the Morgan and Morecambe Transmission Assets (Transmission Assets) DCO which is currently in examination, with one of the route options presented for the offshore export cable for the EIST project crossing through the Order Limits for the Transmission Assets.
64. The EIA Methodology (Chapter 5 of the EIST project Scoping Report) confirms that a CEA, following the PINS guidance, will be undertaken. Therefore, by the time the DCO application is submitted, a comprehensive CEA will have been undertaken which will need to take account of Morecambe Offshore Windfarm Generation Assets project, as well as the Morgan and Morecambe Transmission Assets project, ensuring no gap in assessment for any relevant offshore receptors.

7 Wake effects

7.1 Overview

65. Paragraphs 14-16 of the SoS's letter are in relation to wake effects and are provided below for reference:

*14. The Secretary of State notes the positions of the **Applicant** and Interested Parties ("IPs"), in particular **Ørsted IPs**, in relation to wake effects. The Secretary of State also notes the policy in paragraphs 2.8.197 and 2.8.200 of NPS EN-3, as well as the specific policy on wake effects set out in the draft NPS EN-3 which was recently consulted upon. Those policies state that an assessment of the potential effects of the proposed development on existing or permitted infrastructure or activities should be carried out by the applicant, that all reasonable steps should be taken to minimise impacts, that an applicant should show they have made reasonable efforts to work collaboratively with those who may be impacted, prior to the submission of an application, and that appropriate mitigation should be included in any application and ideally agreed between relevant parties.*

*15. The Secretary of State requests that the **Applicant** provides, without prejudice, a proposal to secure:*

- the provision of an assessment (unless the assessment contained in the Wood Thilsted Report commissioned by Ørsted IPs [REP3-112] is agreed by the Applicant (see paragraph 16)); and*
- further consideration of means to minimise any assessed impacts, including opportunities to work with impacted windfarms to achieve this.*

*16. The **Applicant** should provide its views on the final version of the Wood Thilsted Report commissioned by Ørsted IPs [REP3-112].*

7.2 Response

66. The Applicant acknowledges and accepts the concerns raised by the SoS on the approach to wake assessment in the Mona decision. As was noted by the ExA at para. 5.3.98 of its recommendation report on the Mona decision,¹⁰ the question of wake effects has been a "*particularly complex one for applicants and other IPs to navigate*" in the absence of a settled evidence base, clear policy direction, methodological guidance and data sharing mechanisms. The Applicant welcomes the clarity provided by the SoS in his decision letter in respect of Mona on the requirements under the current National Policy Statements, which the Applicant notes will be further clarified when the National Policy Statements are revised following the current consultation.

¹⁰ <https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010137-002301-Mona%20Offshore%20Wind%20Farm%20-%20Recommendation%20Report.pdf>

67. While the Applicant maintains that the position it took in its application documents and throughout examination was appropriate given the guidance, policy and precedent at the time, the Applicant is cognisant that the SoS has now set out clearly what is expected of applicants in future.
68. The Applicant notes that the SoS included a wake effect requirement in the Mona DCO to address the concerns raised by the Ørsted IPs during that examination. These concerns were reiterated (albeit with different percentages of impact) in the examinations for both the Morgan Generation Assets and the Morecambe Generation Assets, as the concerns were primarily related to cumulative wake losses on the Ørsted IPs from the three projects together.
69. While the Applicant did not carry out its own wake assessment, the Applicant did review and provide comments on the Wake Impact Assessment Report prepared by Wood Thilsted and submitted by the Ørsted IPs (REP3-112) during examination (the “Wood Thilsted Report”). As was confirmed by the Applicant at Issue Specific Hearing 2, and noted in its summary of that Hearing submitted at Deadline 4 (REP4-059), the Applicant considers that there is a high-level wake assessment before the SoS (the Wood Thilsted Report) and that, despite this being a conservative and precautionary document that is not based on detailed design for the Morecambe Project, the Applicant does not argue with the substantive content of that report.
70. The Applicant notes that its contribution (0.68%) to a cumulative total additional wake loss in the Wood Thilsted Report is lower than that predicted for either the Mona Project (1.38%) or the Morgan Project (1.64%).
71. The Applicant notes that the SoS, in the Mona decision, concluded that the issue of mitigation had not been satisfactorily considered and therefore should be subject to a DCO requirement to ensure that wake effects and mitigation for such effects could be properly considered. The SoS was comfortable that such a requirement would secure any further reasonable steps needed to mitigate the severity of any impacts.
72. The Applicant and the Ørsted IPs (which represent the views of a group of six owners of offshore windfarms on the West Coast of the UK, within the East Irish Sea, as outlined in their relevant representations)¹¹ have discussed the SoS request for information dated 21 August 2025 and have agreed the following joint response:

Following the close of the examination for the Project the Applicant and the Ørsted IPs have held several meetings to discuss the remaining areas of disagreement in relation to wake effects, and how the issue of mitigation can be satisfactorily considered and secured through a

¹¹ As set out in relevant representations (RR-008), (RR-014), (RR-056), (RR-088), (RR-089), (RR-093). It is noted that the Ørsted IPs’ position as set out in this joint response reflects the specific nature of the of the interests at play in this region and bilateral discussions with the Applicant to date.

requirement within any DCO granted for the Project. The Applicant and the Ørsted IPs note that the Secretary of State, in the Mona decision, concluded that the issue of mitigation had not been satisfactorily considered and therefore should be subject to a requirement to ensure that wake effects and mitigation for such effects could be properly considered.

The Applicant and the Ørsted IPs agree that a process for addressing wake effects can be secured through a DCO requirement. However, both the Applicant and the Ørsted IPs consider that the wording of the wake effects requirement included in the Mona Offshore Wind Farm Order 2025 requires further clarification to ensure the interests of all parties are properly considered and balanced, particularly regarding what should be included within a wake effects plan and the process that should be followed in respect of this plan. The Applicant and the Ørsted IPs have agreed updated requirement wording which is set out below. This is presented on an accepted (and not without prejudice) basis.

The Applicant and the Ørsted IPs have had extensive engagement regarding the text of this requirement and are confident it creates a more appropriate process for dealing with wake effects than that provided by the Mona Offshore Wind Farm Order 2025. The Applicant and the Ørsted IPs consider that this form of requirement could secure the provision of a robust wake effects plan, following a process which includes consultation with the Ørsted IPs and which specifically requires the provision of an assessment in due course. This requirement also ensures that mitigation for wake effects is not necessarily limited to design mitigation. It is anticipated that these operational measures could further develop (for example, turbine providers may in future adapt their turbine offerings to mitigate for wake effects). It is acknowledged by both the Applicant and the Ørsted IPs that understanding wake effects, and consequently mitigating for those effects, is a rapidly evolving field within industry and therefore the requirement should be ‘future-proofed’ as far as possible.

Given that no wake effects plan has been agreed to date, and that the actual extent of wake losses cannot yet be modelled as detailed design is not complete, the Ørsted IPs are unable to withdraw their objections. However, it is considered by both the Applicant and the Ørsted IPs that the inclusion of their preferred agreed wake effects requirement could secure the provision of any further reasonable steps that can be taken to mitigate the severity of the impact of wake effects on the Ørsted IPs, through either a wake effects plan consulted upon with the Ørsted IPs or demonstrating that alternative mitigation between the parties has been agreed.

The agreed form of this requirement (using the Mona requirement as the starting point) is as follows, with changes agreed by the Applicant and the Ørsted IPs shown in tracked changes:

“Wake effects

~~29X~~.—(1) No part of any wind turbine generator may be erected as part of the authorised development until either—

(a) A wake effects plan has been submitted to and approved by the Secretary of State following consultation with the owners of the existing offshore wind farms; or

(b) The undertaker has provided evidence to the Secretary of State that alternative mitigation for wake effects has been agreed with each of the owners of the existing ~~Ørsted~~ offshore wind farms.

(2) The wake effects plan provided in accordance with paragraph (1)(a) must include:

(a) details of reasonable steps that have been taken by the undertaker in the final design of the authorised development or reasonable measures which will be applied during the operation of the authorised development (or both) to minimise wake effects on the existing Ørsted offshore wind farms whilst maximising without materially reducing the capacity of the authorised development within the identified technical, environmental and other constraints of the authorised development;

(b) a wake effects assessment showing the modelled wake effect of the proposed final design on the existing offshore wind farms;

(c) details of consultation with the owners of the existing offshore wind farms and the extent of any agreement or disagreement with them on—

(i) whether any design changes or operational measures could further reduce the wake effect impacts; and

(ii) the conclusions of the wake effects assessment under paragraph 2(b).

(3) Where paragraph (1)(a) applies, the wake effects plan must be implemented as approved and the design plan submitted to the licensing authority under condition ~~179~~(1)(a) of ~~s~~Schedule 14 of 6 (Deemed Marine Licence under the 2009 Act: Morecambe Offshore Windfarm Generation Assets) to this Order must be in accordance with any approved wake effects plan.

(4) For the purposes of this requirement—

“existing ~~Ørsted~~ offshore wind farms” means ~~Barrow offshore wind farm, Burbo Bank extension, Walney Extension, West of Duddon Sands, Walney offshore wind farm or Burbo bank~~ any of the following—

(a) Barrow Offshore Windfarm;

(b) Burbo Bank Offshore Windfarm;

(c) Burbo Bank Extension Offshore Windfarm;

(d) Walney 1 Offshore Windfarm;

(e) Walney 2 Offshore Windfarm;

(f) Walney Extension 3 Offshore Windfarm;

(g) Walney Extension 4 Offshore Windfarm; and

(h) West of Duddon Sands Offshore Windfarm

as such wind farm was consented at the date of this Order and provided that such wind farm remains operational at the date the application to discharge this requirement is made.

In order that any approved wake effects plan is accommodated within the Design Plan which must be submitted to the licensing authority for approval under the Deemed Marine Licence, the amendment identified in tracked changes below is also required to the current wording of Schedule 6, Part 2, paragraph 9(1)(a):

“Pre-construction plans and documentation

9.— (1) No part of the licensed activities may commence until the following (insofar as relevant to that activity or phase of activity) have been submitted to and approved by the MMO in consultation with the relevant statutory nature conservation body, Trinity House, the MCA, the Lake District National Park Authority, the Arnside and Silverdale National Landscape Partnership and the Forest of Bowland National Landscape Joint Advisory Committee, as appropriate—

(a) a design plan (which accords with the design statement) at a scale of between 1:25,000 and 1:50,000, including detailed representation on the most suitably scaled admiralty chart, which is to be submitted at least six months before the intended commencement of licensed activities to be approved by the MMO setting out proposed details of the authorised project, including the:

(i) number, dimensions, specification, and foundation type(s) for each wind turbine generator and offshore substation platform;

(ii) the proposed layout of all wind turbine generators and offshore substation platforms (which shall be in accordance with the recommendations for layout contained in MGN654 and its annexes), including grid coordinates of the centre point of the proposed location for each wind turbine generator and offshore substation platform and providing that such centre point is subject to a maximum up to 55m micro-siting in any direction unless otherwise agreed with the MMO in consultation with the MCA and Trinity House;

(iii) proposed specification and layout of all cables;

(iv) proposed location and specification of all other aspects of the authorised project; and

(v) any archaeological exclusion zones or micro-siting requirements relating to any benthic habitats of conservation, ecological or economic importance constituting reef habitats of principal importance

*as listed under section 41 of the Natural Environment and Rural Communities Act 2006(a),
to ensure conformity with the description of Work No. 1 and Work No. 2
and compliance with conditions 1 and 2 [and any wake effects plan
approved by the Secretary of State in accordance with requirement \[\].](#)*

8 Civil and military aviation and radar

8.1 BAE Systems Operations Limited (Warton Aerodrome) and Defence Infrastructure Organisation (DIO)

73. Paragraph 17 and 18 of the SoS's letter is in relation to the status of agreements with aviation stakeholders, and is provided below for reference:

*17. The **Applicant** and **BAE Systems Operations Limited Warton Aerodrome** should provide an update on the status of their commercial agreements and whether agreement has been reached on the wording of Requirement 8 in the Applicant's draft Development Consent Order [REP6-002].*

*18. The **Applicant** and **DIO** should provide an update on whether agreement has been reached on the wording of Requirement 8 in the Applicant's draft Development Consent Order [REP6-002]. **DIO** should confirm if it can now remove its objection.*

74. The Applicant and BAE Systems (Operations) Ltd have discussed the SoS's request for information dated 21 August 2025 and have agreed the joint response below. Consistent with the SoS's request for information with the other Round 4 developments, the DIO proposes to issue a separate response directly to the SoS in response to question 18, however the Applicant expects this to be consistent with the joint response provided below:

Throughout examination, the Applicant and BAE Systems (Operations) Limited and DIO regularly met to discuss the impacts of the project on Warton Aerodrome's national sovereign defence capabilities, air traffic services and operations and to consider suitable mitigation that addressed those impacts.

At the close of examination, the Applicant and BAE Systems (Operations) Limited had agreed on an appropriate DCO requirement that secured the appropriate process for mitigation for air traffic services to be developed and agreed (as noted in the Statement of Common Ground [REP6-024]). The text of the DCO requirement relating to the primary surveillance radar at Warton was largely agreed between the Applicant, BAE Systems (Operations) Limited and DIO, save for one outstanding point that had not been agreed at the close of examination.

The Applicant, BAE Systems (Operations) Limited and DIO have subsequently discussed these requirements in light of the Secretary of State's decision to grant the Mona Offshore Wind Farm Order 2025 and submissions made to the Secretary of State in respect of the Morgan Generation Project. The parties have agreed that the air traffic services requirement (Requirement 7) should be amended slightly to better mirror the drafting in respect of those two projects to ensure consistency across the Irish Sea projects. Additionally, the PSR requirement (Requirement 8) has now been agreed between the

parties, subject to similar minor amendments for consistency across projects. The agreed form of requirement(s) (with amendments to the version submitted by the Applicant at the close of examination shown in tracked changes) are as follows:

“Operation of Warton Aerodrome (Air Traffic Services)”

7.—(1) No part of any wind turbine generator or any offshore substation platform shall be erected as part of the authorised development until the Secretary of State has, having consulted with the CAA and operator—

(a) ~~an ATS mitigation scheme has been submitted to and approved by the Secretary of State, in consultation with the CAA and the operator~~ approved an ATS mitigation scheme; and

(b) ~~the Secretary of State, following consultation with the CAA and the operator, has~~ confirmed that it is satisfied that the approved ATS mitigation scheme has been implemented by the operator (the costs of which shall be the sole responsibility of the undertaker in accordance with sub-paragraph (4)(a)).

(2) For the purposes of this requirement—

(a) “approved ATS mitigation scheme” means the ATS mitigation scheme as approved by the Secretary of State in accordance with sub-paragraph (1)(a);

(b) “ATS mitigation scheme” means a scheme which is designed to prevent or remove any adverse impacts arising from the authorised development on the operation of Warton Aerodrome, including but not limited to—

(i) the Aerodrome’s ability to provide and deliver, on an uninterrupted basis—

(aa) national sovereign defence capabilities;

(bb) safe airport operational and air traffic services that are fit for purpose for both civil and military aircraft operations; and

(cc) any other operational requirements which are identified by the operator; and

(ii) the Aerodrome’s IFP, MSA, DF, UHF and VHF communication systems; and

(c) “operator” means BAE Systems (Operations) Limited (incorporated in England and Wales with company number 01996687, whose registered office is at Victory Point, Lyon Way, Frimley, Camberley, Surrey GU16 7EX) or such other organisation as is licensed from time to time under sections 5 and 6 of the Transport Act 2000(a) to provide air traffic services at Warton Aerodrome or any organisation employed by BAE Systems (Operations) Limited to provide an air traffic service at Warton Aerodrome.

(3) The approved ATS mitigation scheme must remain in place and be complied with for the lifetime of the authorised development (including the period during which the authorised development is being decommissioned in accordance with the decommissioning programme approved pursuant to requirement 10).

(4) The undertaker shall ~~at its sole cost~~ be solely responsible for the costs of—

(a) implementing the approved ATS mitigation scheme prior to the erection of any part of any wind turbine generator or any offshore substation platform forming part of the authorised development;

(b) thereafter ~~maintain~~ing, ~~repair~~ing and ~~replace~~replacing, including without limitation resolving any failure (howsoever caused) of, the approved ATS mitigation scheme throughout the lifetime of the authorised development (including the period during which the authorised development is being decommissioned in accordance with the decommissioning programme approved pursuant to requirement 10); and

(c) in the event of any amendment being made to the authorised development which gives rise to adverse impacts on the operation of Warton Aerodrome which are new or different to those identified by the environmental statement, ~~working~~ing with the CAA and the operator in good faith to ~~implement and thereafter maintain~~agree any additional mitigation measures required to prevent or remove such adverse impacts throughout the lifetime of the authorised development (including the period during which the authorised development is being decommissioned in accordance with the decommissioning programme approved pursuant to requirement 10), together with the costs of implementing and maintaining on an ongoing basis those additional mitigation measures.”

“Warton Aerodrome Primary Surveillance Radar

8.—(1) No part of any wind turbine generator shall be erected as part of the authorised development until a radar mitigation scheme has been submitted to and approved by the Secretary of State, in consultation with the Ministry of Defence and the operator.

(2) For the purposes of this requirement—

(a) “approved radar mitigation scheme” means the radar mitigation scheme as approved by the Secretary of State in accordance with sub-paragraph (1);

(b) “Ministry of Defence” means the Ministry of Defence as represented by Defence Infrastructure Organisation – Safeguarding, St George’s House, DIO Head Office, DMS Whittington, Lichfield, Staffordshire, WS14 9PY or any successor body;

(c) “operator” means BAE Systems (Operations) Limited (incorporated in England and Wales with company number 01996687, whose registered office is at Victory Point, Lyon Way, Frimley, Camberley, Surrey GU16 7EX) or such other organisation as is licensed from time to time under sections 5 and 6 of the Transport Act 2000(a) to provide air traffic services at Warton Aerodrome or any organisation employed by BAE Systems (Operations) Limited to provide an air traffic service at Warton Aerodrome;

(d) “PSR” means the primary surveillance radar at Warton Aerodrome or any upgrade thereto or replacement thereof;

(e) “PSR air traffic control operations” means the air traffic control operations, including both civil and military aircraft operations, of the Ministry of Defence or the operator (or both) which are reliant upon the PSR; and

(f) “radar mitigation scheme” means a scheme designed to prevent or remove any adverse impacts arising from the authorised development upon the operation of the PSR or the PSR air traffic control operations.

(3) No wind turbine generator erected as part of the authorised development shall be permitted to rotate its rotor blades about its horizontal axis other than for the purpose of testing the proposed mitigation solution identified in the approved radar mitigation scheme until the Secretary of State, following consultation with the Ministry of Defence and the operator, has confirmed that it is satisfied that—

(a) the proposed mitigation solution has been subject to technical and operational assessment and, in particular, has undergone ‘in-situ’ testing in line with the requirements of (and for the time period(s) specified in) the approved radar mitigation scheme;

(b) the performance criteria required to be met by the proposed mitigation solution, as specified in the approved radar mitigation scheme, have been met; and

(c) the approved radar mitigation scheme has been implemented by the operator (the costs of which shall be the sole responsibility of the undertaker in accordance with sub-paragraph (5)(a)).

(4) The approved radar mitigation scheme must remain in place and be complied with for so long as any of the wind turbine generators erected as part of the authorised development are operational and provided that the PSR remains an operational requirement of the Ministry of Defence or the operator (or both).

(5) The undertaker shall ~~at its sole cost~~ be solely responsible for the costs of —

(a) implementing the approved radar mitigation scheme prior to any wind turbine generator erected as part of the authorised development being permitted to rotate its rotor blades about its horizontal axis;

(b) thereafter maintaining, repairing and ~~replacing~~ replacing, including without limitation resolving any failure (howsoever caused) of, the approved radar mitigation scheme for so long as any of the wind turbine generators erected as part of the authorised development are operational and provided that the PSR remains an operational requirement of the Ministry of Defence or the operator (or both); and

(c) in the event of any amendment being made to the authorised development which gives rise to new or different adverse impacts to those identified in the environmental statement on the operation of the PSR or the PSR air traffic control operations ~~(or both)~~, working with the Ministry of Defence and the operator in good faith to ~~implement and thereafter maintain~~ agree any additional mitigation measures required to prevent or remove such adverse impacts for so long as any of the wind turbine generators erected as part of the authorised development are operational and provided that the PSR remains an operational requirement of the Ministry of Defence or the operator (or both), together with the costs of implementing and maintaining on an ongoing basis those additional mitigation measures.”

In respect of the Warton PSR requirement (Requirement 8), BAE Systems (Operations) Limited is not currently able to confirm the operational viability of

the Applicant's proposed mitigation solution. Accordingly, BAE Systems (Operations) Limited and DIO (on behalf of the Ministry of Defence) consider that their objections must remain in place until such time as BAE Systems (Operations) Limited confirms that the proposed mitigation solution is operationally viable or, where a conclusion to the contrary is reached, an alternative mitigation solution or "system of solutions" has been identified and it has been confirmed that this alternative solution is operationally viable. In the meantime, the parties agree that there is a suitable requirement agreed which secures the submission, approval and implementation of a radar mitigation scheme and provides a framework within which discussions between the Applicant, BAE Systems (Operations) Limited and DIO can continue post-consent.

The Applicant and BAE Systems (Operations) Limited consider that the updated air traffic services requirement (Requirement 7) ensures that the necessary mitigations (including the commercial agreement relating to those mitigations) will be secured post-consent and engagement between the Applicant and BAE Systems (Operations) Limited is continuing in this regard. Discussions on developing a suitable commercial agreement have commenced.

8.2 Other Aviation Requirements

75. Following the close of the examination there has also been further engagement between the Applicant and BAE Systems Marine Limited on the wording of the requirement for the air traffic services (ATS) at Walney Aerodrome.
76. While not directly requested by the SoS, the Applicant and BAE Systems (Marine) Limited have discussed the SoS's request for information dated 21 August 2025 and have agreed the following joint update.

Throughout examination, the Applicant and BAE Systems (Marine) Limited regularly met to discuss the impacts of the project on Walney Aerodrome's national sovereign defence capabilities, air traffic services and operations and to consider suitable mitigation that addressed those impacts.

At the close of examination, the Applicant and BAE Systems (Marine) Limited had agreed on an appropriate DCO requirement that secured the appropriate process for mitigation for air traffic services to be developed and agreed (as noted in the Statement of Common Ground [REP6-027]).

The Applicant and BAE Systems (Marine) Limited have subsequently discussed this requirement in light of the Secretary of State's decision to grant the Mona Offshore Wind Farm Order 2025 and submissions made to the Secretary of State in respect of the Morgan Generation Project. The parties have agreed that the air traffic services requirement (Requirement 6) should

be amended slightly to better mirror the drafting in respect of those two projects to ensure consistency across the Irish Sea projects. The agreed form of requirement (with amendments to the version submitted by the Applicant at the close of examination shown in tracked changes) is as follows:

“Operation of Walney Aerodrome (Air Traffic Services)”

6.—(1) No part of any wind turbine generator or any offshore substation platform shall be erected as part of the authorised development until the Secretary of State has, having consulted with the CAA and the operator—

(a) ~~an ATS mitigation scheme has been submitted to and approved by the Secretary of State, in consultation with the CAA and the operator~~ approved an ATS mitigation scheme; and

(b) ~~the Secretary of State, following consultation with the CAA and the operator, has~~ confirmed that it is satisfied that the approved ATS mitigation scheme has been implemented by the operator (the costs of which shall be the sole responsibility of the undertaker in accordance with sub-paragraph (4)(a)).

(2) For the purposes of this requirement—

(a) “approved ATS mitigation scheme” means the ATS mitigation scheme as approved by the Secretary of State in accordance with sub-paragraph (1)(a);

(b) “ATS mitigation scheme” means a scheme which is designed to prevent or remove any adverse impacts arising from the authorised development on the operation of Walney Aerodrome, including but not limited to—

(i) the Aerodrome’s ability to provide and deliver, on an uninterrupted basis—

(aa) national sovereign defence capabilities;

(bb) safe airport operational and air traffic services that are fit for purpose for both civil and military aircraft operations; and

(cc) any other operational requirements which are identified by the operator; and

(ii) the Aerodrome’s IFP, MSA and VHF communication systems; and

(c) “operator” means BAE Systems Marine Limited (incorporated in England and Wales with company number 00229770, whose registered office is at Victory Point, Lyon Way, Frimley, Camberley, Surrey GU16 7EX) or such other organisation as is licensed from time to time under sections 5 and 6 of the Transport Act 2000(a) to provide air traffic services at Walney Aerodrome or any organisation employed by BAE Systems Marine Limited to provide an air traffic service at Walney Aerodrome.

(3) The approved ATS mitigation scheme must remain in place and be complied with for the lifetime of the authorised development (including the period during which the authorised development is being decommissioned in accordance with the decommissioning programme approved pursuant to requirement 10).

(4) The undertaker shall ~~at its sole cost~~ be solely responsible for the costs of —

- (a) *implement~~ing~~* the approved ATS mitigation scheme prior to the erection of any part of any wind turbine generator or any offshore substation platform forming part of the authorised development;
- (b) *thereafter maintain~~ing~~, repair~~ing~~ and ~~replace~~replacing*, including without limitation resolving any failure (howsoever caused) of, the approved ATS mitigation scheme throughout the lifetime of the authorised development (including the period during which the authorised development is being decommissioned in accordance with the decommissioning programme approved pursuant to requirement 10); and
- (c) *in the event of any amendment being made to the authorised development which gives rise to adverse impacts on the operation of Walney Aerodrome which are new or different to those identified by the environmental statement, work~~ing~~ with the CAA and the operator in good faith to ~~implement and thereafter maintain~~agree any additional mitigation measures required to prevent or remove such adverse impacts throughout the lifetime of the authorised development (including the period during which the authorised development is being decommissioned in accordance with the decommissioning programme approved pursuant to requirement 10), together with the costs of implementing and maintaining on an ongoing basis those additional mitigation measures.*

The Applicant and BAE Systems (Marine) Limited consider that this air traffic services requirement ensures that the necessary mitigations (including the commercial agreement relating to those mitigations) will be secured post-consent and engagement between the Applicant and BAE Systems (Marine) Limited is continuing in this regard. Discussions on developing a suitable commercial agreement have commenced.

- 77. The wording for all other requirements relating to impacts on civil and military aviation and radar had been agreed with the relevant stakeholders before the end of the examination and no changes have been discussed following the SoS's decision on the Mona Offshore Wind Farm Order 2025 or the Morgan Offshore Wind Project Generation Assets Order 2025.
- 78. The Applicant notes that there are minor differences between its proposed aviation requirements and those included in the Mona Offshore Wind Farm Order 2025 and the Morgan Offshore Wind Project Generation Assets Order 2025. Any differences are stylistic points which reflect different drafting preferences of the relevant Examining Authority and do not change the meaning or intention of the requirements.

9 Commercial negotiations and agreements

9.1 Overview

79. Paragraphs 19-21 of the SoS's letter is in relation to commercial negotiations and agreements and is provided below for reference:

*19. The **Applicant** and **Harbour Energy** are invited to provide any additional responses to Spirit Energy's assessment of the Morecambe Offshore Windfarm's impact on MH Assets Safety and Regulatory Compliance, as set out in their most recent submission [REP6-058].*

*20. The **Applicant**, **Harbour Energy** and **Spirit Energy** are requested to provide an update on the progress made towards agreeing the form of the Protective Provisions to be included at Part 2 and Part 3 of Schedule 3 of the Applicant's draft Development Consent Order [REP6-002].*

*21. The **Applicant** and **Stena Line Limited** should provide an update on the status of their commercial negotiations. If agreement has not been reached, updates should include details of whether an agreement is expected, and if so when agreement is expected.*

80. As a general point in respect of paragraphs 19-21, the Applicant would note that it has been in communication with TCE) who are aware of the detailed discussions that have been ongoing between the interested parties. TCE advised that the following response could be submitted on their behalf at this submission:

The Crown Estate is supportive of efforts between parties to work towards co-existence and co-location, in particular practical approaches being discussed around managing the overlapping timelines of decommissioning of oil and gas infrastructure and construction of the wind farm infrastructure.

9.2 Response to Question 19

81. The Applicant has reviewed Appendix B: Morecambe Offshore Windfarm Impact on Morecambe Hub Assets Safety and Regulatory Compliance of the most recent submission from Spirit Energy (REP6-058).
82. The report and its supporting independent study 'assesses the operational safety and regulatory compliance impacts on the affected assets against the Morecambe Hub offshore Safety Case'. Therefore, the assessment focusses entirely on impacts that might arise during operational phases.
83. The Applicant considers that it has provided a response to the impact of the project on the operation of the Spirit Energy affected assets during the examination phase, for a summary of its position the Applicant refers the SoS to the summary and sign-posting document submitted at Deadline 6 (REP6-040).

84. The appendix submitted by Spirit Energy at Deadline 6 considers the potential impact of the project on a number of aspects of The Morecambe Hub Safety Case, as well as more generally on the ability of Spirit Energy to comply with the legal requirements under a range of legislation, regulations, and guidance. The Applicant reiterates that they have not been provided with a copy of The Morecambe Hub Safety Case, and neither has this been submitted by Spirit Energy; but that their team of safety consultants, drawing on their experiences of preparing, reviewing and approving safety cases have all concluded that there is no reason that an updated safety case, prepared by Spirit Energy, would not be accepted by the relevant authorities; and that Spirit Energy “*could find a way to continue safe operation if they were inclined to do so*” (ERM REP5-068).
85. In relation to the other legal requirement listed by Spirit Energy in Section 4.0 of Appendix B to REP6-058, the Applicant, as advised by their safety consultants DNV, highlights that all duty holders are required to operate in accordance with their accepted safety case. In doing so, this means complying with any other relevant statutory provisions which means any other relevant regulations such as Offshore Installations (Prevention of Fire and Explosion, and Emergency Response) Regulations. If there is an accepted safety case in place – and Spirit are complying with it – then it is DNV’s opinion that the regulatory concerns articulated in appendix B of Spirit’s submission are being satisfactorily addressed. This includes the specific requirements of the safety case regulations and the other regulations mentioned in said Appendix B of REP6-058.

9.3 Response to Question 20

86. The Applicant and Harbour Energy have agreed the following joint response:
- The Applicant and Harbour Energy have discussed the SoS request for information dated 21 August 2025 and have agreed the following joint response.*
- Throughout the application process the Applicant and Harbour Energy met regularly, with meetings continuing during the examination. The Parties have engaged post-examination to understand the extent to which each of the Party’s activity programmes may align, and to agree a form of Protective Provisions to be included Part 2 of Schedule 3 of the Development Consent Order.*
- Through these discussions the Applicant and Harbour Energy have now agreed the form of the Protective Provisions which both parties agree can be included in Part 2 of Schedule 3 of the Development Consent Order, and are appended to this response at **Appendix C**. With the conclusion of these discussions Harbour Energy can confirm to the SoS that subject to the inclusion of the agreed form Protective Provisions in*

the made DCO it withdraws its objection to the Morecambe Generation DCO application.

87. Alongside the agreed form Protective Provisions in favour of Harbour Energy, the plan referred to in the Protective Provisions is also included at Appendix C.

88. The Applicant and Spirit Energy have agreed the following joint response.

Throughout the application process the Applicant and Spirit Energy met regularly. During examination the meetings were focused on identifying and explaining the areas of disagreement with a view to reaching a shared understanding of the impacts of the Project on Spirit Energy operations in the East Irish Sea.

The Parties have engaged post-examination to understand the extent to which each of the Party's activity programmes may align in order to establish if an opportunity exists that would allow the progression to co-existence conversations, and have moved into co-existence conversations. The Applicant has shared draft Heads of Terms for a commercial agreement with Spirit and work is in progress to identify if there is a window of opportunity for a date to change from an interim to an enduring buffer which could align with both programmes. The parties are seeking to understand if programme alignment exists with a view towards reaching a commercial agreement that will replace both Spirit and the Applicant's submitted Protective Provisions.

9.4 Response to Question 21

89. The Applicant and Stena Line have discussed the SoS request for information dated 21 August 2025 and have agreed the following joint response:

Throughout the application process, the Applicant and Stena Line have had positive discussions to address impacts to their operations within the East Irish Sea.

The Applicant and Stena Line have on 1 September 2025 reached agreement verbally on the key terms of a commercial agreement and are now working to conclude the necessary documentation which is expected to be entered into shortly.

90. The Applicant will continue to work with Stena Line to conclude this necessary documentation such that Stena Line's objection can be formally withdrawn.
91. The Applicant notes for completeness that, in deciding to grant development consent for the Mona project, the SoS did not consider the existence of a commercial agreement with Stena Line (or the absence of such an agreement with Isle of Man Steam Packet Company) to reduce the identified adverse effects on navigational safety or to otherwise impact the moderate negative weight ascribed to impacts on navigation and shipping. The Applicant considers this approach aligns with its position, as summarised in its Summary

and Signposting Document (REP6-040), that the *“the Applicant does not consider that the conclusion of a commercial agreement between the Applicant and Stena Line should carry weight in the DCO decision”* (paras. 244-245). While the Applicant therefore considers that the SoS has sufficient information before him regarding shipping and navigation without the final confirmation that the agreement with Stena Line is concluded, this is expected to be a moot point, and the Applicant will be in a position to provide a further and conclusive update in early course.

Morecambe Offshore Windfarm: Generation Assets

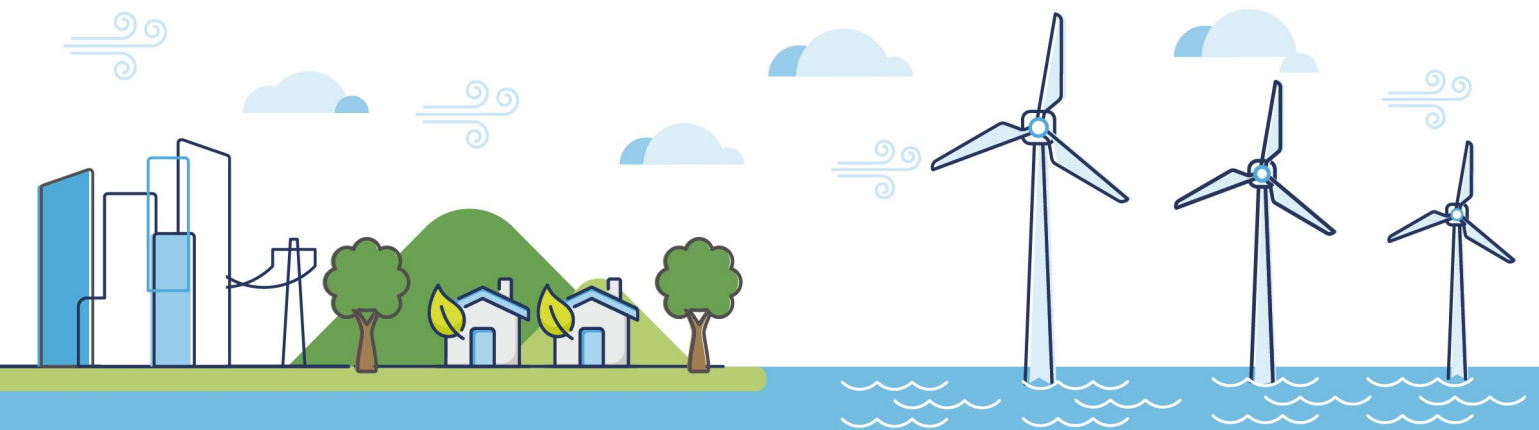
The Applicant's Response to Secretary of State Letter and Request for Information

Appendix A: Assessment of Alternative Solutions

Figures

Document Reference: 10.1.1

Rev 01



Document History

Doc No	MOR001-FLO-CON-ENV-FIG-0014	Rev	01
Alt Doc No	n/a		
Document Status	Approved for Use	Doc Date	1 September 2025
PINS Doc Ref	10.1.1	APFP Ref	n/a

Rev	Date	Doc Status	Originator	Reviewer	Approver	Modifications
01	1 September 2025	Approved for Use	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	n/a

Contents

1	Appendix A: Assessment of Alternative Solutions Figures	5
---	---	---

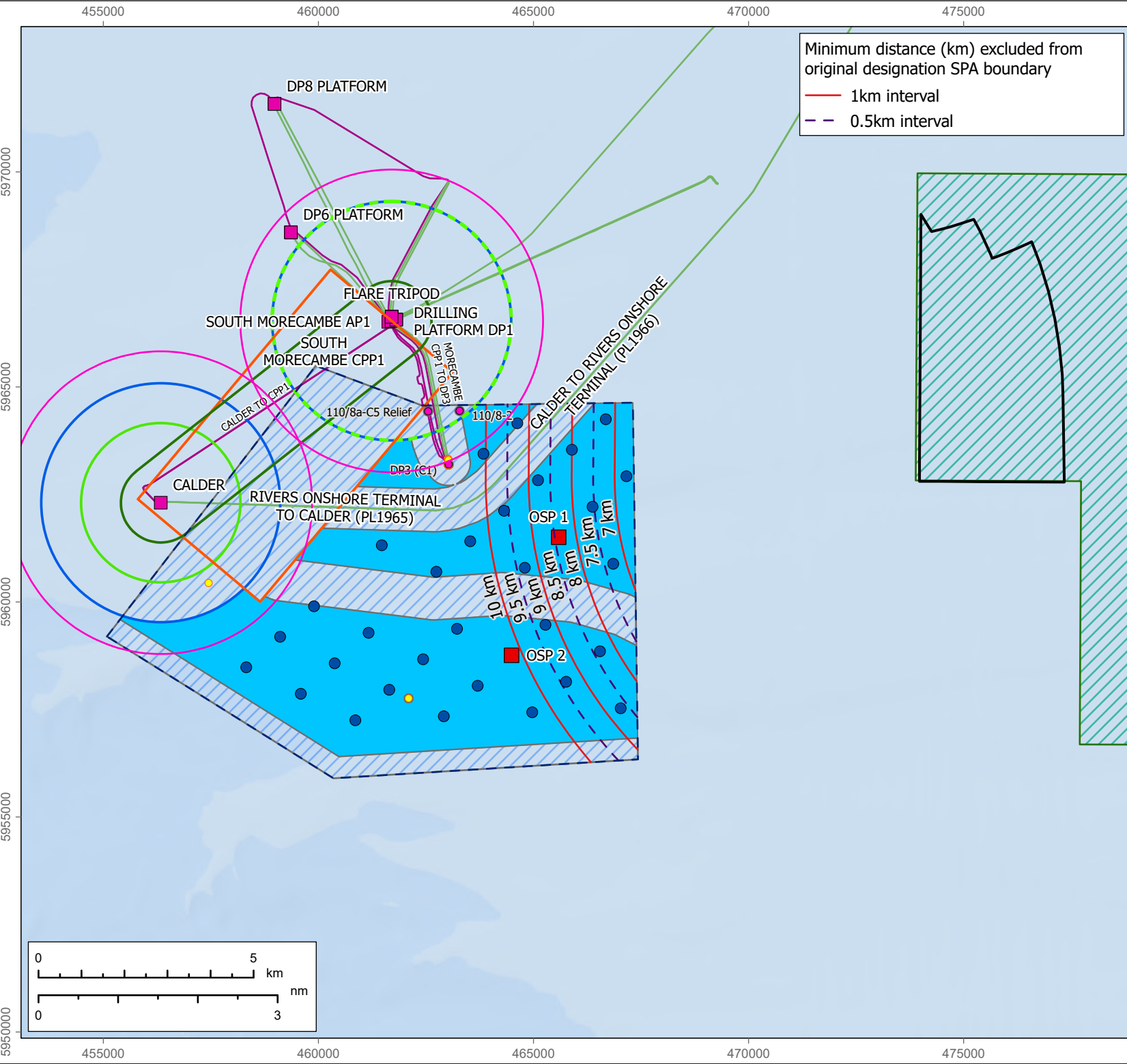
Figures

Figure 1 Windfarm Site reductions and corresponding area of effect on Liverpool Bay SPA – 30 WTGs	6
Figure 2 Windfarm Site reductions and corresponding area of effect on Liverpool Bay SPA – 35 WTGs	7
Figure 3 Windfarm Site reductions and corresponding area of effect on Liverpool Bay SPA – Current indicative layout (34 WTGs)	8
Figure 4 Windfarm Site reductions avoiding potential effects on Shell Flat – 30 WTGs	9
Figure 5 Windfarm Site reductions avoiding potential effects on Shell Flat – 35 WTGs	10
Figure 6 Windfarm Site reductions avoiding potential effects on Shell Flat - Current indicative layout (34 WTGs)	11

1 Appendix A: Assessment of Alternative Solutions Figures

Table 1.1 Drawings updated in response to Assessment of Alternative Solutions Question 5

Drawing number	Original Examination Reference	Description
Figure 1	REP5a-057 Figure 2.1	Colours used for buffers around the SPA boundary revised; addition of 1.9nm buffer around Calder and CPP1
Figure 2	REP5a-057 Figure 2.2	Colours used for buffers around the SPA boundary revised; addition of 1.9nm buffer around Calder and CPP1
Figure 3	New drawing	Drawing based on Figure 1 with current indicative layout for WTG
Figure 4	REP5a-057 Figure 2.3	Addition of 1.9nm buffer around Calder and CPP1
Figure 5	REP5a-057 Figure 2.4	Addition of 1.9nm buffer around Calder and CPP1
Figure 6	New drawing	Drawing based on Figure 4 with current indicative layout for WTG



LEGEND

- Morecambe Offshore Windfarm site
- Liverpool Bay original SPA
- Area within original Special Protection Area (SPA) boundary potentially impacted by Morecambe Project
- WTG location - 30 notional layout
- OSP location
- Unconstrained area
- Constrained area
- WTG and OSP marine buffer zone (Calder 1nm, CPP1 1.5nm)
- WTG Marine Corridor
- WTG and OSP aviation buffer zone (1.5nm)
- WTG and OSP aviation buffer zone (1.9nm)
- WTG aviation corridor
- Wells
- Spirit legacy and relief well locations
- Well buffer zone
- Platform
- Pipelines & umbilicals
- Power cable

Data:
NSTA
Esri, HERE, Garmin, USGS
Esri, HERE
OceanWise, Esri, Garmin, NaturalVue


PROJECT: MORECAMBE OFFSHORE WINDFARM: GENERATION ASSETS

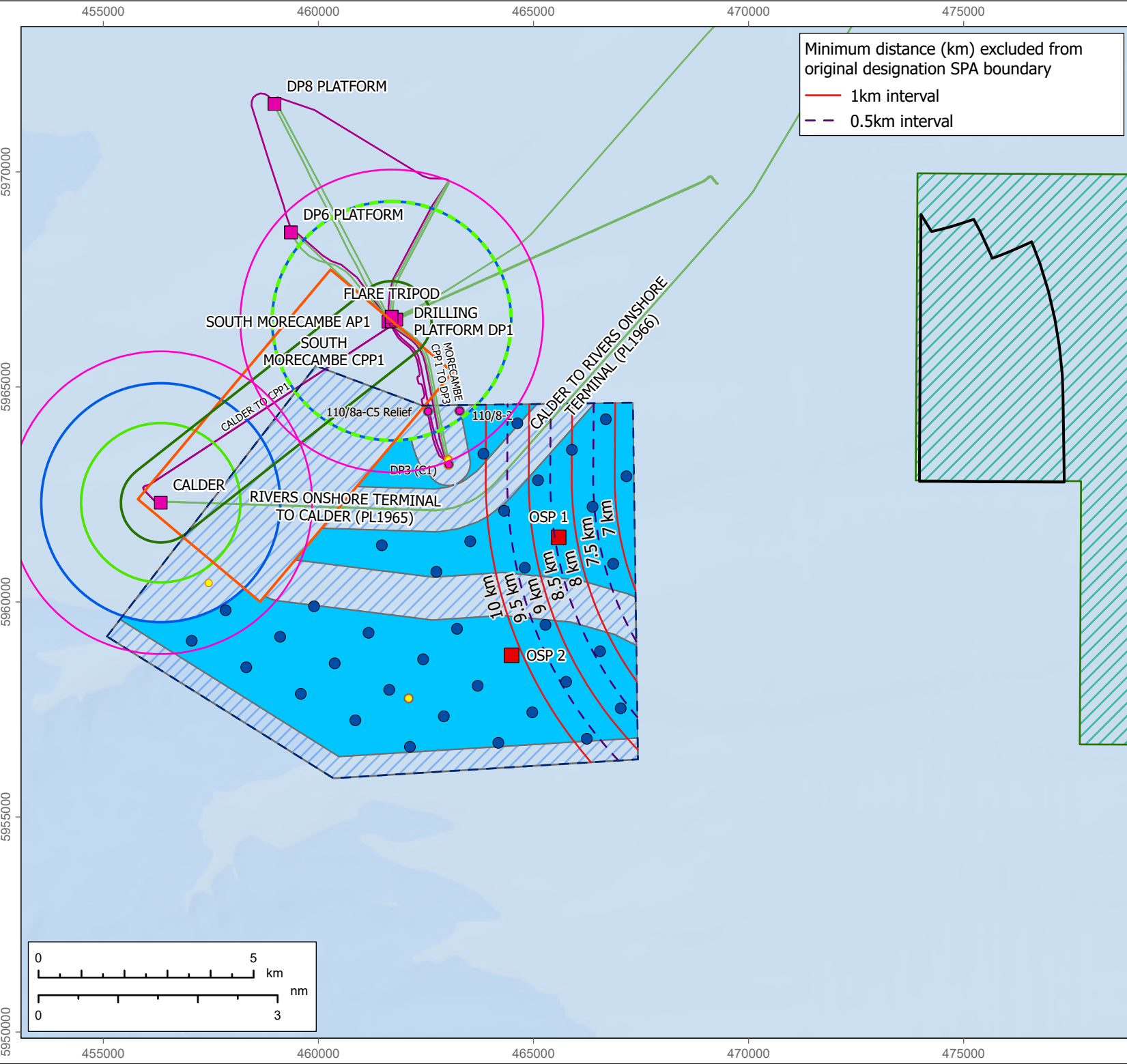
TITLE: Figure 1 Windfarm Site reductions and corresponding area of effect on Liverpool Bay SPA - 30 WTGs

REV	DATE	COMMENTS	DRAWN	CHECKED
001	28/08/2025		SK	OG

ARCGIS REF: FLO_MOR_GIS_PRJ001_MOR_SoS_RFI_Rev001
DRAWING: FLO-MOR-GIS-MAP001-Figure 1-Rev001

SCALE:	PAGE SIZE:	COORDINATE SYSTEM:
1:120,000	A4	WGS 1984 UTM Zone 30N

 **MORECAMBE**



LEGEND

- Morecambe Offshore Windfarm site
- Liverpool Bay original SPA
- Area within original Special Protection Area (SPA) boundary potentially impacted by Morecambe Project
- WTG location - 35 notional layout
- OSP location
- Unconstrained area
- Constrained area
- WTG and OSP marine buffer zone (Calder 1nm, CPP1 1.5nm)
- WTG Marine Corridor
- WTG and OSP aviation buffer zone (1.5nm)
- WTG and OSP aviation buffer zone (1.9nm)
- WTG aviation corridor
- Wells
- Spirit legacy and relief well locations
- Well buffer zone
- Platform
- Pipelines & umbilicals
- Power cable

Data:
NSTA
Esri, HERE, Garmin, USGS
Esri, HERE
OceanWise, Esri, Garmin, NaturalVue

PROJECT: MORECAMBE OFFSHORE WINDFARM:
GENERATION ASSETS

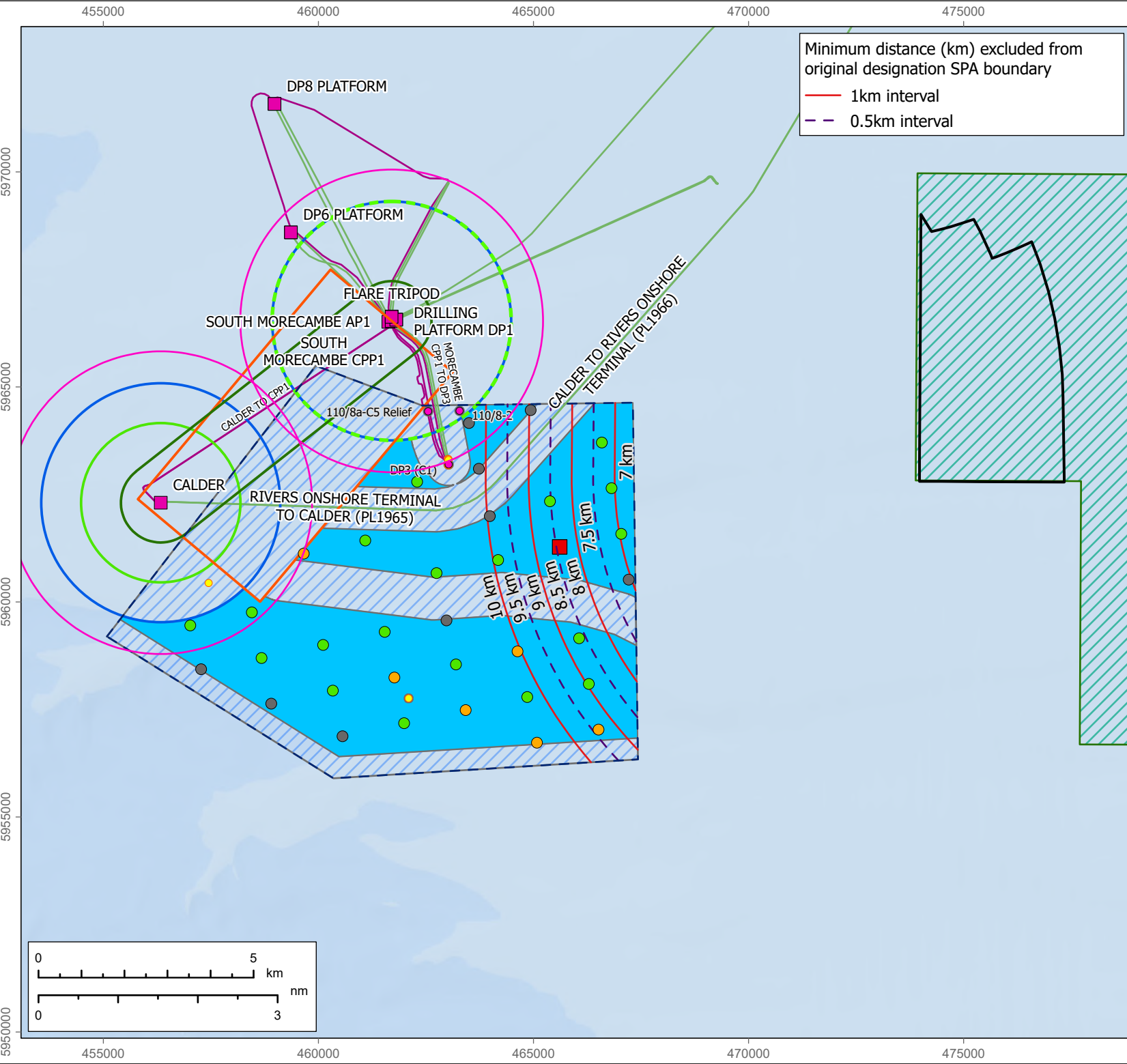
TITLE: Figure 2 Windfarm Site reductions and
corresponding area of effect on Liverpool
Bay SPA – 35 WTGs

REV	DATE	COMMENTS	DRAWN	CHECKED
001	28/08/2025		SK	OG

ARCgis REF: FLO_MOR_GIS_PRJ001_MOR_SoS_RFI_Rev001
DRAWING: FLO-MOR-GIS-MAP002-Figure 2-Rev001

SCALE: 1:120,000 PAGE SIZE: A4 COORDINATE SYSTEM: WGS 1984 UTM Zone 30N





Minimum distance (km) excluded from original designation SPA boundary

- 1km interval
- 0.5km interval



LEGEND

- Morecambe Offshore Windfarm site
- Liverpool Bay original SPA
- Area within original Special Protection Area (SPA) boundary potentially impacted by Morecambe Project
- WTG locations
 - Site investigation data (high certainty)
 - Site investigation data (some uncertainty)
 - No site investigation data (high uncertainty)
 - OSP location
- Unconstrained area
- Constrained area
- WTG and OSP marine buffer zone (Calder 1nm, CPP1 1.5nm)
- WTG Marine Corridor
- WTG and OSP aviation buffer zone (1.5nm)
- WTG and OSP aviation buffer zone (1.9nm)
- WTG aviation corridor
- Wells
- Spirit legacy and relief well locations
- Well buffer zone
- Platform
- Pipelines & umbilicals
- Power cable

Data:
NSTA
Esri, HERE, Garmin, USGS
Esri, HERE
OceanWise, Esri, Garmin, NaturalVue

PROJECT: MORECAMBE OFFSHORE WINDFARM: GENERATION ASSETS

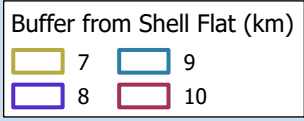
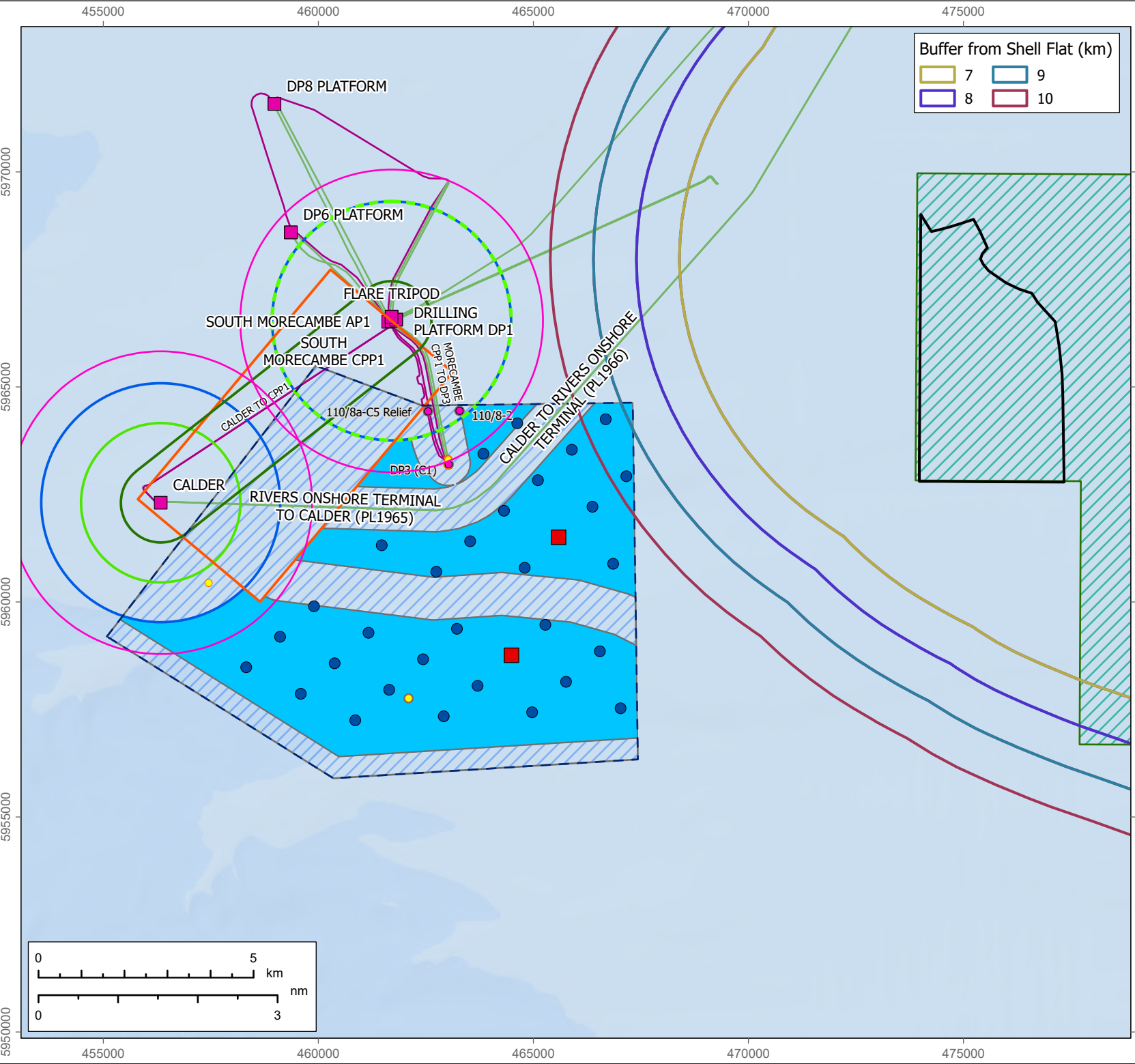
TITLE: Figure 3 Windfarm Site reductions and corresponding area of effect on Liverpool Bay SPA – Current indicative layout (34 WTGs)

REV	DATE	COMMENTS	DRAWN	CHECKED
001	29/08/2025		SK	OG

ARCGIS REF: FLO_MOR_GIS_PRJ001_MOR_SoS_RFI_Rev001
DRAWING: FLO-MOR-GIS-MAP003-Figure 3-Rev001

SCALE: 1:120,000 PAGE SIZE: A4 COORDINATE SYSTEM: WGS 1984 UTM Zone 30N





- LEGEND**
- Morecambe Offshore Windfarm site
 - Liverpool Bay original SPA
 - Area within original Special Protection Area (SPA) boundary potentially impacted by Morecambe Project only (Removal of Shell Flat)
 - WTG location - 30 notional layout
 - OSP location
 - Unconstrained area
 - Constrained area
 - WTG and OSP marine buffer zone (Calder 1nm, CPP1 1.5nm)
 - WTG Marine Corridor
 - WTG and OSP aviation buffer zone (1.5nm)
 - WTG and OSP aviation buffer zone (1.9nm)
 - WTG aviation corridor
 - Wells
 - Spirit legacy and relief well locations
 - Well buffer zone
 - Platform
 - Pipelines & umbilicals
 - Power cable

Data:
NSTA
Esri, HERE, Garmin, USGS
Esri, HERE
OceanWise, Esri, Garmin, NaturalVue

PROJECT: MORECAMBE OFFSHORE WINDFARM: GENERATION ASSETS

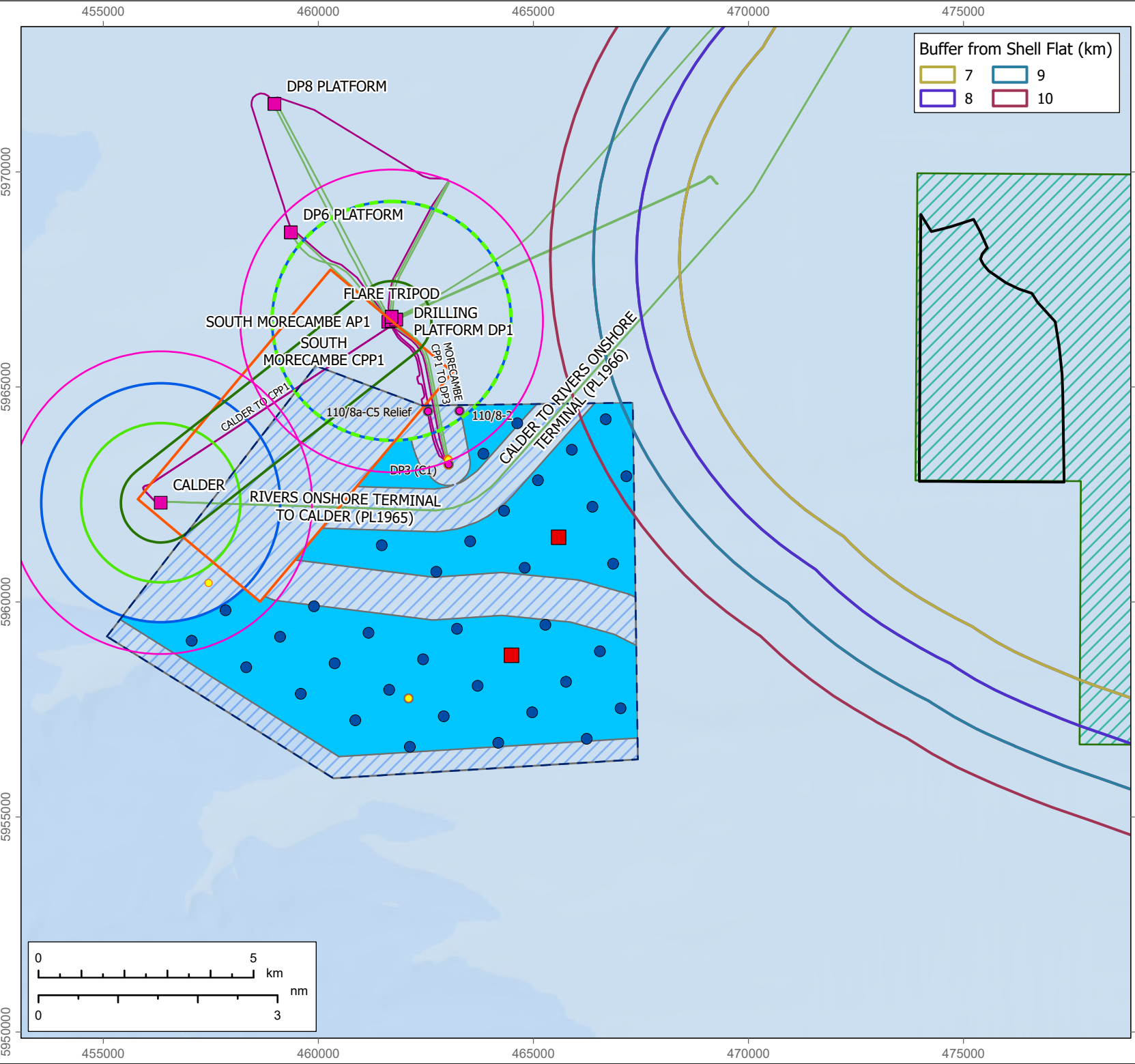
TITLE: Figure 4 Windfarm Site reductions avoiding potential effects on Shell Flat – 30 WTGs

REV	DATE	COMMENTS	DRAWN	CHECKED
001	28/08/2025		SK	OG

ARCGIS REF: FLO_MOR_GIS_PRJ001_MOR_SoS_RFI_Rev001
DRAWING: FLO-MOR-GIS-MAP004-Figure 4-Rev001

SCALE: 1:120,000 PAGE SIZE: A4 COORDINATE SYSTEM: WGS 1984 UTM Zone 30N





LEGEND

- Morecambe Offshore Windfarm site
- Liverpool Bay original SPA
- Area within original Special Protection Area (SPA) boundary potentially impacted by Morecambe Project only (Removal of Shell Flat)
- WTG location - 35 notional layout
- OSP location
- Unconstrained area
- Constrained area
- WTG and OSP marine buffer zone (Calder 1nm, CPP1 1.5nm)
- WTG Marine Corridor
- WTG and OSP aviation buffer zone (1.5nm)
- WTG and OSP aviation buffer zone (1.9nm)
- WTG aviation corridor
- Wells
- Spirit legacy and relief well locations
- Well buffer zone
- Platform
- Pipelines & umbilicals
- Power cable

Data:
NSTA
Esri, HERE, Garmin, USGS
Esri, HERE
OceanWise, Esri, Garmin, NaturalVue

PROJECT: **MORECAMBE OFFSHORE WINDFARM: GENERATION ASSETS**

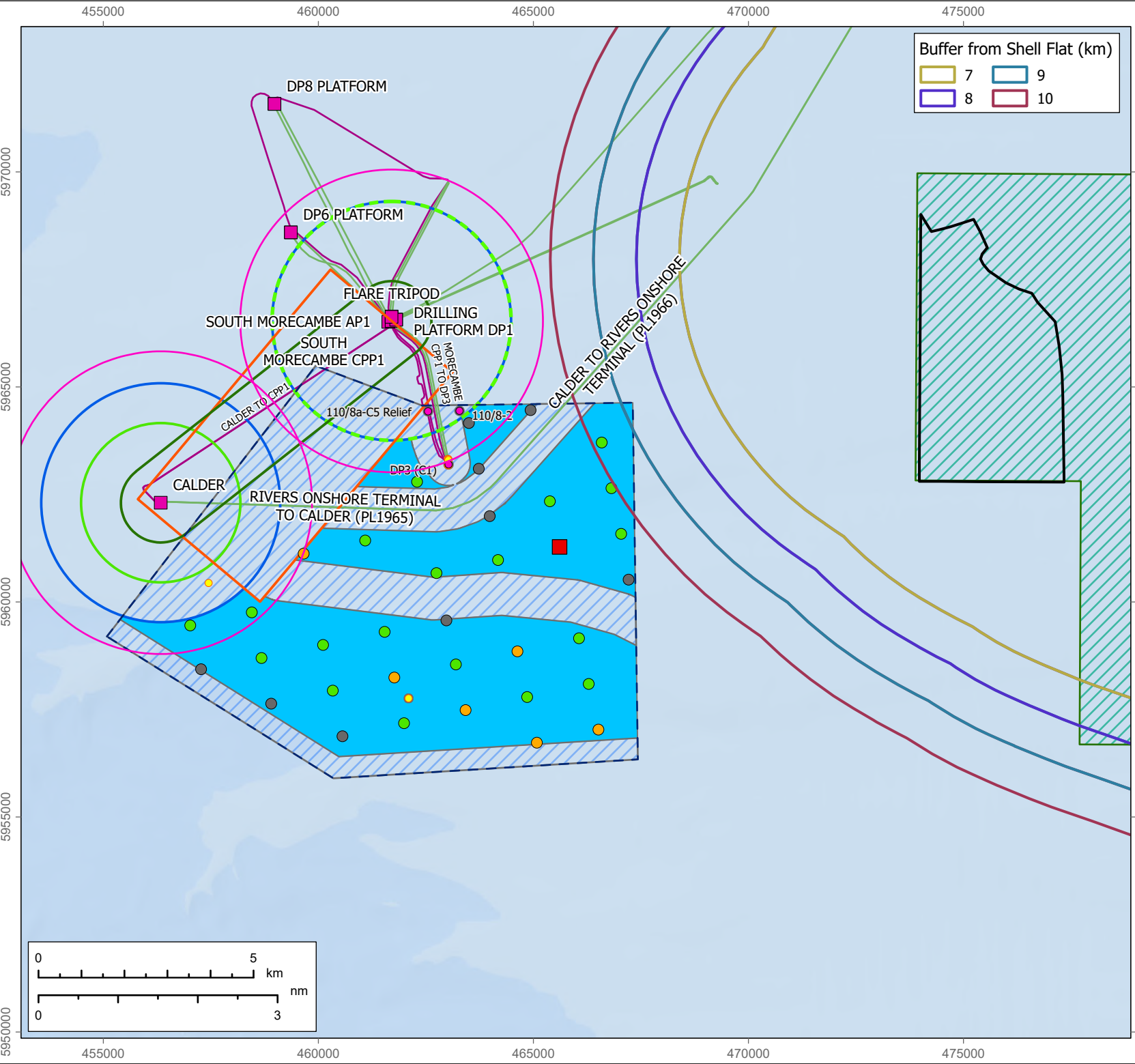
TITLE: **Figure 5 Windfarm Site reductions avoiding potential effects on Shell Flat – 35 WTGs**

REV	DATE	COMMENTS	DRAWN	CHECKED
001	28/08/2025		SK	OG

ARCGIS REF: FLO_MOR_GIS_PRJ001_MOR_SoS_RFI_Rev001
DRAWING: FLO-MOR-GIS-MAP005-Figure 5-Rev001

SCALE: 1:120,000	PAGE SIZE: A4	COORDINATE SYSTEM: WGS 1984 UTM Zone 30N
------------------	---------------	--





LEGEND

- Morecambe Offshore Windfarm site
- Liverpool Bay original SPA
- Area within original Special Protection Area (SPA) boundary potentially impacted by Morecambe Project only (Removal of Shell Flat)

WTG locations

- Site investigation data (high certainty)
- Site investigation data (some uncertainty)
- No site investigation data (high uncertainty)
- OSP location
- Unconstrained area
- Constrained area
- WTG and OSP marine buffer zone (Calder 1nm, CPP1 1.5nm)
- WTG Marine Corridor
- WTG and OSP aviation buffer zone (1.5nm)
- WTG and OSP aviation buffer zone (1.9nm)
- WTG aviation corridor
- Wells
- Spirit legacy and relief well locations
- Well buffer zone
- Platform
- Pipelines & umbilicals
- Power cable

Data:
NSTA
Esri, HERE, Garmin, USGS
Esri, HERE
OceanWise, Esri, Garmin, NaturalVue


PROJECT: MORECAMBE OFFSHORE WINDFARM: GENERATION ASSETS

TITLE: Figure 6 Windfarm Site reductions avoiding potential effects on Shell Flat - Current indicative layout (34 WTGs)

REV	DATE	COMMENTS	DRAWN	CHECKED
001	29/08/2025		SK	OG

ARCGIS REF: FLO_MOR_GIS_PRJ001_MOR_SoS_RFI_Rev001
DRAWING: FLO-MOR-GIS-MAP006-Figure 6-Rev001

SCALE:	PAGE SIZE:	COORDINATE SYSTEM:
1:120,000	A4	WGS 1984 UTM Zone 30N

 **MORECAMBE**

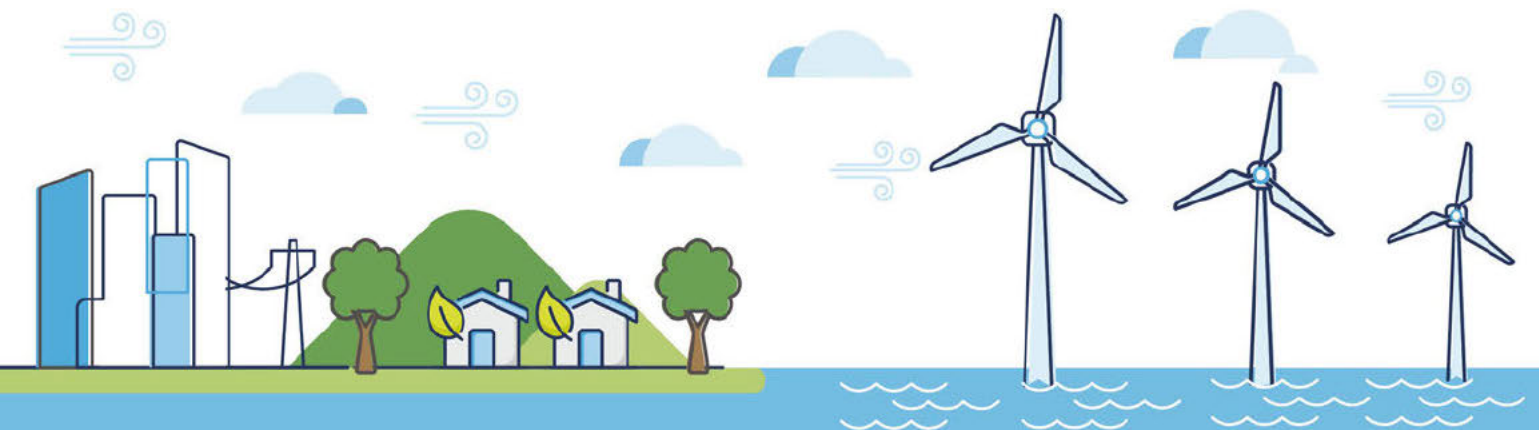
Morecambe Offshore Windfarm: Generation Assets

The Applicant's Response to Secretary of State Letter and Request for Information

Appendix B: Update to red-throated diver compensation proposals

Document Reference: 10.1.2

Rev 01



Document History

Doc No	MOR001-FLO-CON-ENV-NOT-0062	Rev	01
Alt Doc No	n/a		
Document Status	Approved for Use	Doc Date	01 September 2025
PINS Doc Ref	n/a	APFP Ref	n/a

Rev	Date	Doc Status	Originator	Reviewer	Approver	Modifications
01	01 September 2025	Approved for Use	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	n/a

To: Secretary of State for Energy Security and Net Zero
From: Morecambe Offshore Windfarm Ltd
Date: [Click here to enter a date.](#)
Copy: n/a
Our reference: MOR001-FLO-CON-ENV-NOT-0062
Classification: Project related
Checked by: Morecambe Offshore Windfarm Limited

Subject: Update to red-throated diver compensation proposals

1 Introduction

As part of the Development Consent Order (DCO) submission for the Morecambe Offshore Windfarm Generation Assets (the Project), Morecambe Offshore Windfarm Ltd (the Applicant) submitted a 'without prejudice' derogation case and compensation proposals (Examination reference REP5a-046) and Outline Compensation Implementation and Monitoring Plan (oCIMP) (REP5a-048) for the red-throated diver (RTD) feature of Liverpool Bay Special Protection Area (SPA) to the Project Examination. In his letter of 21 August 2025, the Secretary of State requested further detail and updates from the Applicant on elements of the compensation proposals:

9. *The **Applicant** is requested to provide further detail on the shortlisted locations proposed for the primary RTD compensation measures, along with the supporting rationale for site selection. This should include:*

- *Explanation of how each site was assessed for suitability, particularly in relation to known RTD breeding success and habitat characteristics;*
- *An update on any additional landowner support obtained, and clarification on whether the waterbodies for which support has been secured are considered optimal for the proposed measures. If not, please outline what further steps are being taken to refine site selection.*
- *An evaluation of risks associated with the proposed sites, including:*
 - *The potential for drawing RTDs away from designated SPAs into areas without statutory protection;*
 - *Any potential adverse outcomes arising from inappropriate habitat management interventions.*

This note provides information to support the Applicant's response to the Secretary of State's Question 9, and is an appendix to The Applicant's Response to Secretary of State Letter and Request for Information (Document 10.1). The additional information set out here comprises:

- Updates to landowner support and estates where without prejudice compensation measures are being progressed, together with supporting rationale for site selection.
- Details of site visits and surveys undertaken by the Applicant since close of the Examination in April 2025.
- Information on the approach to the survey and evaluation of loch suitability, and updates on available results.
- An evaluation of risks associated with the proposed compensation sites.

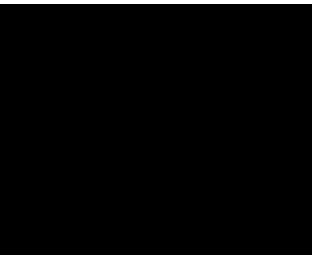
In addition, the Applicant has provided an update on discussions that have been taking place with Natural England since the end of the Examination in April 2025 on the RTD compensation proposals.

2 Landowner updates and site refinement

At the close of the Examination, the Applicant had confirmed in-principle support from eight landowners located in the west and north of Scotland, details of which are provided in Appendix 1 Section 4.2 of REP5a-046. Since that time, the Applicant has received a letter of support from a ninth landowner, [REDACTED] a copy of which is provided as **Annex 1**.

Post-examination, the Applicant undertook a review of the supportive landowners to prioritise those it considered most likely to provide suitable conditions for the delivery of compensation measures. The site selection process was informed by the criteria of proximity to coastal waterbodies with suitably sized lochs and lochans for RTD breeding requirements together with previous breeding records (as detailed in the Habitats Regulations Assessment Without Prejudice Derogation Case – Red-Tailed Diver at Liverpool Bay / Bar Lerowl SPA, Appendix 1 (REP5a-046)). It was decided that the [REDACTED] Estates would not be progressed further at present, as [REDACTED] of the [REDACTED] habitats indicated a lower suitability than other supportive estates. In addition, the [REDACTED] was excluded from further consideration, due to the small number of suitable lochs (c. 3) and [REDACTED] ment changes at the estate.

Therefore, post-examination five of the supportive estates that were most suitable according to the Derogation Case site selection criteria have been further progressed through engagement with the landowners, site visits and/or site surveys:



Further information is provided in the following sections.

3 Site visits

Site visits to the [REDACTED] Estates were undertaken in the first week of June 2025 [REDACTED] the pressures and the distance of the estate from the [REDACTED] sites visited. The visits were made by a representative of the Applicant and an ornithologist from Haskoning. The purpose of the visits was to:

- Discuss the principles of the proposed compensation measures with the landowners and estate managers, to improve their understanding of the requirements and enable them to ask any questions about the proposals.
- Discuss the logistics of compensation implementation and understand whether the estates would be able to assist with practical elements, or if they would prefer the Project to be responsible for delivery.
- Review existing knowledge and information held by the estates on the presence of breeding RTDs and suitability of lochs for implementation of the measures.
- Undertake general visits with the landowners and/or estate managers to see potentially suitable locations, where practicable.

A summary of the outcomes from these visits is provided below.

3.1

The Applicant met with the landowner and two local ornithological specialists with detailed knowledge of the estate ecology based on extensive involvement with previous surveys at [REDACTED] over a number of decades. The landowner confirmed that estate staff could assist with the practical implementation of compensation measures, as required. The estate has a network of tracks that would assist access to the majority of lochs.

The local specialists have an excellent knowledge of lochs on the estate and confirmed at least nine lochs where RTDs have recently or currently breed. In addition, over 20 additional lochs have been identified that would be suitable for enhancement through the provision of rafts. An estate plan showing the location of potentially suitable lochs is shown on **Figure 1**.

The local ornithological specialists also confirmed that mink occur within the estate, and therefore mink control could also be beneficial as a primary or adaptive management measure.

The [REDACTED] Estate is considered highly suitable for the delivery of compensation measures and would provide capacity for the majority of the requirement (i.e. 30 lochs in total).

3.2

The Applicant met with the landowner who confirmed that estate staff could assist with the practical implementation of compensation measures, as required. The estate has an access track that would assist access to the some of the lochs.

Following the site visit the Applicant has been in contact with a local ornithological specialist who has been undertaking surveys across the estate during the spring and summer of 2025. Full survey results are awaited, but preliminary results have confirmed at least one RTD breeding loch and a further possible breeding loch, that latter previously identified (from a preliminary review by the Applicant prior to the site visits of potentially suitable lochs and lochans on the estate, based on the site selection criteria and breeding records in the Derogation Case (REP5a-046)) as having been used by RTDs. In addition, the preliminary review identified a third loch with recent evidence of RTD use. 2-3 lochs without current evidence of RTD use were considered suitable for enhancement. An estate plan showing the location of potentially suitable lochs is shown on **Figure 2**. In total, it is considered that the [REDACTED] could provide 4-6 lochs suitable for delivery of the compensation measures.

3.3

The Applicant met with the landowner, who had an excellent knowledge of RTD (and black-throated diver) activity on the estate. The landowner confirmed that estate staff could assist with the practical implementation of compensation measures, as required. The estate has a network of tracks that would assist access to the majority of lochs. The landowner also confirmed that active mink trapping is being undertaken on the estate, including the development of '4G traps' that provide remote access to trap trigger data. This enables more traps to be set, as checking frequency can be reduced. The landowner has previously deployed rafts on some lochs (primarily for black-throated diver) and has developed effective raft designs.

The estate confirmed at least four lochs where RTDs have recently or currently breed. In addition, at least four additional lochs have been identified that would be suitable for enhancement through the provision of rafts. An estate plan showing the location of potentially suitable lochs is shown on **Figure 3**.

3.4

The Applicant met with the landowners and site manager. The landowners confirmed that estate staff could potentially assist with the practical implementation of compensation measures, or would consider

use of third-party specialists arranged by the Applicant. It was noted that a number of the lochs are distant from roads or access tracks, although access with specialist vehicles is still likely to be possible.

The estate currently has limited knowledge of existing use by RTDs, and therefore separate surveys were undertaken by the Applicant. Details of these surveys are provided in **Section 4**.

4 Loch surveys

Following site visits in June 2025, the Applicant commissioned specialist surveys of two estates, in order to evaluate their suitability for the delivery of RTD compensation. These comprised the [REDACTED] Estate, where, following the site visit, it was considered there was insufficient information to confirm suitability, and the [REDACTED] Estate, where a site visit had not previously been undertaken for logistical reasons. For the [REDACTED] three estates [REDACTED] sufficient information was available to confirm suitability, and therefore no further survey was required.

The surveys were undertaken using an adapted single-species survey method for red-throated diver, published in Gilbert et al. (1998), to coincide with detectable breeding activity (that is, post-incubation) on waterbodies across two estates in Scotland, UK, over a single visit. Two visits, as suggested by Gilbert et al. (1998) were not required in this case because the Applicant was not concerned with breeding outcomes, just the presence of breeding birds. Otherwise survey timings and conditions were as Gilbert et al. (1998). In addition, an evaluation of loch suitability and potential to enhance suitability (i.e. through provision of breeding rafts or other measures) was undertaken.

An experienced ornithologist carried out surveys in accordance with protocols published by the Bird Survey & Assessment Steering Group¹. The ornithologist had specific knowledge and experience of RTD ecology, and all surveys were carried out with appropriate Schedule 1 licencing, issued by NatureScot, in case of disturbance to breeding birds. However, generally lochs were all surveyed from a distance using long-range optics to minimise any disturbance risk.

Survey results have been received by the Project and are undergoing internal review, however a total of 52 lochs were visited (17 at [REDACTED] and 35 at [REDACTED]). Each loch was evaluated on a scale of 0-4 for current suitability and suitability for enhancement

- 0 – a waterbody is unsuitable for breeding red-throated diver
- 1 – low breeding potential
- 2 – moderate potential in areas of the highest breeding density (i.e. secondary sites used as populations reach their carrying capacity)
- 3 – good potential for use, especially in high density areas (i.e. good habitat where birds are present)
- 4 – high potential where birds are present (i.e. ideal habitat, likely use even where density is low)

The evaluation score was based on a range of characteristics and the professional judgment of the surveyor, including loch size, elevation, bank topography and vegetation, proximity to other lochs, extent of floating vegetation, presence of islands, and surrounding topography (for predator detection and take-off/landing).

The confirmed presence of RTD was not identified at any of the surveyed lochs (i.e. level 4); however, a number of lochs were scored at 2 or 3, with many of these suitable for enhancement through raft provision. Estate plans showing the locations of potentially suitable lochs are shown on **Figure 4** [REDACTED] and **Figure 5** [REDACTED]. Pending confirmation of survey results, it is considered [REDACTED] in two and four [REDACTED] three to six lochs at [REDACTED] could be suitable for the delivery of RTD compensation

¹ Bird Survey & Assessment Steering Group. (2023). Bird Survey Guidelines for assessing ecological impacts, v.1.0.0. <https://birdsurveyguidelines.org> [accessed: July 2025]

5 Risks associated with the proposed compensation sites

In the Secretary of State's questions to the Applicant, an evaluation of risks associated with the proposed compensation measures was requested. Responses to these points are provided below.

The potential for drawing RTDs away from designated SPAs into areas without statutory protection

The Applicant considers it extremely unlikely that RTDs from designated SPA populations would be drawn into areas where compensation measures may be undertaken. Okill (1992) demonstrated that RTDs exhibit very high site fidelity throughout their lifetime, and stated that '*once an adult bird has obtained a site it is unusual for it to change site in subsequent years*'. On the rare occasions when a bird does move, Okill speculated that this was most likely when a site becomes unsuitable, e.g. as a result of water loss or disturbance. It is expected that such events would be rare within an SPA, which should be specifically managed and maintained to favour its supporting features. However, in the unlikely event that sites within an SPA became unsuitable for RTDs, it could be argued that it would benefit the designated population to have alternative sites available outside of the designated area.

Notwithstanding the above, it is noted that the proposed compensation sites are all relatively distant from SPAs designated for RTD. Potential lochs in the [REDACTED] are approximately [REDACTED] m from the [REDACTED] SPA at its [REDACTED]. This SPA is extremely large, with the [REDACTED] from lochs in the estate. The [REDACTED] is more than [REDACTED] m from the closest RTD SPA [REDACTED], and [REDACTED] more than [REDACTED] m from their closest RTD SPA, which is also [REDACTED]. Evidence from recoveries of divers ringed as chicks in Shetland show that females tend to recruit into areas further from their natal area than males. Although sample sizes were small, males were found breeding only 0.5 - 4.4km (mean 2km) from their natal site, whereas females moved 6 - 68km (mean =38km; Okill, 1992). It should be highlighted that the purpose of the compensation is to increase productivity and hence increase recruitment into SPAs within the National Site Network (NSN). Accordingly, any risk that birds could be drawn from SPAs needs to be balanced against the benefit that new birds entering the SPA populations, as a result of the compensation measures, could deliver. The Applicant considers that these benefits substantially outweigh the very low risk that birds could be drawn out of an SPA.

Any potential adverse outcomes arising from inappropriate habitat management interventions

The Applicant notes that habitat management is not proposed as a primary compensation measure. At this stage, it is anticipated that habitat management is only likely as an adaptive management measure (i.e. if artificial raft provision proves substantially less successful than predicted). In that event, it would be expected that any management would be very localised to the affected loch, e.g. through small scale bank management to enhance water retention, or habitat management of banks to increase suitability for nesting RTDs. Any such works would be discussed and agreed through the RTD compensation steering group (as would all measures implemented as part of compensation proposals), which would include representatives from the relevant SNCBs. This would ensure that such measures were appropriate and would not result in unintended consequences. Any further adaptive management measures required (such as the control of American mink) would be approved through the steering group, drawing on the knowledge and expertise of its members.

6 Consultation with Natural England on updated proposals

The Applicant met with Natural England on 28 July 2025, during which progress on site selection development, site visits and surveys undertaken and updates on the RTD compensation proposals were presented and discussed. Natural England welcomed the progress on the detail of the measures, as set out in this note. Specific discussion was held around the scale of the proposed measures (i.e. the appropriate number of lochs and lochans to deliver the compensation scheme). Following the meeting, the Applicant provided further information and rationale to Natural England on refinement of the proposed quantum, which is provided in **Annex 2**. This additional information was reviewed by Natural England ornithologists, and it was confirmed in an email from Natural England to the Applicant (21

August 2025) that *'the approach to distribution of lochs to receive rafts and control lochs is appropriate and supported by the rationale provided.'*

7 Summary

The additional information gathered by the Applicant since the close of the Examination has confirmed that that, from the five estates selected by the Applicant, between 46 and 53 suitable lochs are likely to be available to enable delivery of the compensation measures. These are secured in principle by the letters of support provided in the RTD Derogation Case (REP5a-046) and in this report, which the Applicant considers to be appropriate for a 'without prejudice' Derogation Case. Further development of the RTD compensation measure would follow a decision of the Secretary of State as to whether compensation is required for RTD impacts to Liverpool Bay SPA, following which the Applicant would move to undertake commercial agreements with the supportive landowners to secure further development of the measure.

Whilst the Applicant reiterates that it considers that it has demonstrated robustly within the Examination that there would be no adverse effect on the integrity of Liverpool Bay SPA (either for the Project alone or in-combination with other plans and projects), the Secretary of State can take comfort that the proposed 'without prejudice' measure would provide deliverable and effective compensation. Furthermore, the Applicant has demonstrated that it is very unlikely that there would be any adverse or unintended consequences as a result of the proposed measures.

Should the Secretary of State confirm that compensation for RTD is required, the Applicant has proposed use of a total of 30 lochs, comprising:

- Provision of rafts on 10 lochs where there is evidence of existing nesting RTDs
- 10 control lochs (without rafts) where there is evidence of existing nesting RTDs
- Provision of rafts on 10 suitable lochs close to existing nesting RTDs

This refined approach has been discussed with Natural England post-Examination, as reported in **Section 6** and **Annex 2**. Natural England has agreed that this would provide an appropriate scale of compensation for the potential effects of the Project on Liverpool Bay SPA.

8 References

Gilbert, G., Gibbons, D.W., & Evans, J. (1998) Bird Monitoring Methods: A Manual of Techniques for UK Key Species. The Royal Society for the protection of Birds, Sandy, Bedfordshire, England.

Okill, J.D. (1992) Natal dispersal and breeding site fidelity of red-throated Divers *Gavia stellata* in Shetland, Ringing & Migration, 13:1, 57-58, DOI:10.1080/03078698.1992.9674016

9 **Figures**

11 Annex 2 – Compensation Scale Update Note

Note / Memo

Haskoning UK Ltd.
Water & Maritime

To : Natural England
From : Morecambe Offshore Windfarm Limited
Date : 30 July 2025
Copy : RW
Our reference : MOR001-FLO-CON-CAG-MEM-0002
Classification : Project related
Checked by : Morecambe Offshore Windfarm Limited

Subject : Morecambe Generation: Red-throated diver – compensation scale update (without prejudice)

1 Introduction

As part of the Development Consent Order (DCO) submission for the Morecambe Offshore Windfarm Generation Assets (the Project), Morecambe Offshore Windfarm Ltd (the Applicant) submitted a 'without prejudice' derogation case and compensation proposals for red-throated diver (RTD) to the Project Examination (Examination reference (REP3-064) and updated (Rev03) in (REP5a-046). This document set out proposals to provide compensation for possible adverse effects on the overwintering population of RTD at Liverpool Bay Special Protection Area (SPA) arising from disturbance and displacement effects from the Project. It is the Applicant's position that such effects would not result in an adverse effect on integrity (AEoI) on the RTD feature of Liverpool Bay SPA, either alone or in-combination with other plans and projects. However, it is Natural England (NE)'s position that in-combination AEoI cannot be ruled out.

The primary compensation proposed, without prejudice, by the Applicant is the provision of artificial nesting rafts at suitable lochs in the north and west of Scotland; further information on the proposals is provided in Appendix 1 of REP5a-046. NE has confirmed that it broadly accepts that such measures would provide suitable compensation for RTD, subject to the provision of further detail by the Applicant (REP6-050). Following completion of the Examination in April 2025, a meeting between the Applicant and NE was held on 28 July 2025, to provide updates on the development of compensation proposals and other relevant matters. At this meeting, the Applicant explained that a clarification regarding the scale of compensation is being proposed. This note sets out further information to enable NE to further consider whether it considers the proposed scale of compensation to be appropriate and acceptable.

2 Proposed measures

In accordance with REP5a-046, the Applicant has proposed that artificial nesting rafts are provided at 20 suitable lochs in the north and/or west of Scotland. In initial discussions with NE, and as set out in REP3-064, the Applicant had proposed that these would be located on lochs where RTD are known to be breeding, as this has been shown to increase productivity (nesting success) (e.g. Nummi *et al.*, 2013) and hence increase the number of RTDs entering the wider population. In addition to the 20 lochs with rafts, the Applicant also proposed the provision of 20 control lochs with existing nesting divers, against which increased in productivity would be monitored. In the updated derogation case and compensation proposals (REP5a-046), the Applicant proposed (in Section 4.3) that the raft provision would comprise a mixture of lochs where RTDs are known to be breeding, together with suitable lochs close to known breeding locations, but where there is no evidence of current nesting.

In light of this update, the Applicant has reviewed the scale of the compensation measures and proposes the following:

- Provision of rafts on 10 lochs where there is evidence of existing nesting RTDs
- 10 control lochs (without rafts) where there is evidence of existing nesting RTDs
- Provision of rafts on 10 suitable lochs close to existing nesting RTDs

A rationale for the proposed approach is presented below.

3 Rationale

The Applicant considers that by providing rafts at both existing nesting sites and at nearby suitable lochs, this will maximise the potential benefits to the RTD population. As set out in Section 3.1.3.2 of REP5a-046, there is good evidence that providing rafts on existing breeding lochs will increase productivity, while providing rafts at 'new' lochs is effective in increasing the number of breeding pairs (Nummi *et al.*, 2013). Using a combination of both approaches will maximise potential benefits, by both increasing productivity and increasing the total breeding population.

Providing control sites for the 10 existing breeding lochs will enable comparative monitoring to establish that an increase in productivity has occurred. This information can be used to inform adaptive management measures, should they be required. There is no requirement to provide control sites for the 'new' raft lochs, because the baseline for those lochs would be zero RTDs (and hence also zero productivity), and this baseline would not be expected to change for the lifetime of the measures. In other words, the increase in breeding pairs on new lochs would be an absolute increase above the zero baseline, with no requirement for any other control value to demonstrate its benefit.

4 References

Nummi P, Väänänen V-M, Pakarinen R & Pienmunne E. (2013). The Red-throated Diver (*Gavia stellata*) in human-disturbed habitats – building up a local population with the aid of artificial rafts. *Ornis Fennica* 90: 16–22. <https://researchportal.helsinki.fi/en/publications/the-red-throated-diver-gavia-stellata-in-humandisturbed-habitats>

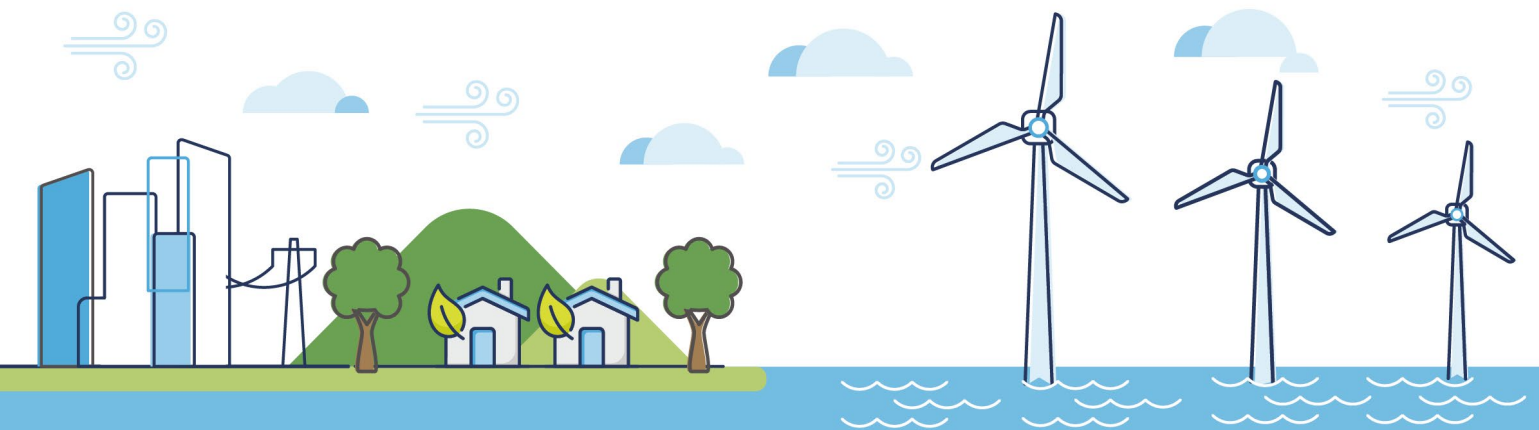
Morecambe Offshore Windfarm: Generation Assets

The Applicant's Response to Secretary of State Letter and Request for Information

Appendix C: The Applicant's Response to Question 20 - Harbour Energy - Agreed Protective Provisions

Document Reference: 10.1.3

Rev 01



Document History

Doc No	MOR001-FLO-CON-ENV-NOT-0063	Rev	01
Alt Doc No	n/a		
Document Status	Approved for Use	Doc Date	03 September 2025
PINS Doc Ref	10.1.3	APFP Ref	n/a

Rev	Date	Doc Status	Originator	Reviewer	Approver	Modifications
01	03 September 2025	Approved for Use	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	n/a

PART [2]

For the protection of Harbour Energy

Application

1. For the protection of the owners from time to time of the Calder Field, which at the date stated in article 1 (citation and commencement) of this Order is Harbour Energy, unless otherwise agreed in writing between the undertaker and the owner, the provisions of this Part of this Schedule shall have effect until completion of all activities required under any statutory decommissioning plan required under the Petroleum Act 1998 in relation to the Calder Field.

Interpretation

2. In this Part of this Schedule —

“**cable**” means the power and telecommunications cables connecting the Calder Platform to the Central Processing Platform 1 complex located in the South Morecambe Field (United Kingdom Continental Shelf block 110/3a) shown purple and annotated as Calder to CPP1 on the Harbour Protective Provisions Plan;

“**Calder Field**” means the Calder offshore gas field which underlies United Kingdom Continental Shelf block 110/7a;

“**Calder Field Facilities**” means the facilities and infrastructure pertaining to the Calder Field;

“**Calder Platform**” means the normally unattended, minimum facilities wellhead platform located in the United Kingdom Continental Shelf block 110/7a D;

“**coexistence agreement**” means an agreement entered on reasonable terms between the undertaker and the owner in respect of the authorised development and the owner’s works to reconcile and protect the interests of the parties as are known at the time;

“**CPP1**” means the manned Central Processing Platform hub complex located in the United Kingdom Continental Shelf Block 110/2a, 110/3a and 110/8a;

“**Harbour Energy**” means Chrysaor Resources (Irish Sea) Limited, a subsidiary of Harbour Energy PLC;

“**Harbour Protective Provisions Plan**” means the plan certified as the Harbour Protective Provisions Plan by the Secretary of State under article 12 (certification of documents and plans, etc.) of the Order;

“**licence**” means United Kingdom Petroleum Production Licence P099;

“**ministerial statement**” means the written statement given by the Secretary of State for Energy and Climate Change to the UK Parliament regarding Crown Estate Leases for Offshore Renewables Projects on 12 July 2011, or any similar supplementary or replacement policy;

“**owner**” means the owners from time to time of the Calder Field, which at the date stated in article 1 (citation and commencement) of this Order is Harbour Energy;

“**owner’s works**” means any exploration, appraisal, development, production, maintenance, interventions or decommissioning activity in accordance with and pursuant to the licence or any statutory decommissioning plan required under the Petroleum Act 1998 in relation to the Calder Field Facilities;

“**pipeline and cable proximity area**” means the area five hundred meters (500m) either side and directly above the pipeline and cable, shown edged pink and annotated as the pipeline and cable proximity area on the Harbour Protective Provisions Plan;

“**pipeline**” means —

- (a) the 3” Rivers onshore terminal to Calder chemical pipeline with pipeline reference number PL1965; and
- (b) the 24” Calder to Rivers onshore terminal gas pipeline with pipeline reference number PL1966

shown green and annotated as the Calder to Rivers Onshore Terminal (PL1966) and Rivers Onshore Terminal to Calder (PL1965) on the Harbour Protective Provisions Plan, together with any associated umbilicals, plant and equipment serving those pipelines;

“**relevant activities**” means all development activity relating to the carrying on of the undertaker’s and owner’s businesses within, or adjacent to the pipeline and cable proximity area or the WTG and OSP aviation buffer zone or WTG and OSP marine buffer zone or WTG marine corridor, as the case may be, including (but not limited to) the preparation of development proposals, the submission of applications for statutory consents associated with those proposals

and consultation in respect thereof, the acquisition of or application for new oil or gas blocks;

“temporary surface infrastructure” means any fixed temporary infrastructure to be used in the construction, operation and maintenance, and decommissioning of the authorised development including, but not limited to, jack-up barges and buoys, but does not include temporary surface infrastructure in transit;

“WTG and OSP aviation buffer zone” means (i) a circular area of three point seven six nautical miles (3.76 nm) of clear airspace measured from the nearest outer extremity edge of the Calder Platform to any tip from any wind turbine generator located within the order limits and extending vertically from mean sea level; and

(ii) a circular area three point seven six nautical miles (3.76 nm) of clear airspace measured from the nearest outer extremity edge of CPP1 to any tip from any wind turbine generator located within the order limits;

each as shown edged dashed purple and annotated as the WTG and OSP aviation buffer zone on the Harbour Protective Provisions Plan;

“WTG and OSP marine buffer zone” means an area of one nautical mile (1 nm) measured from the outer extremity edge of the Calder Platform and extending vertically from mean sea level shown edged in light green and annotated and shown as the WTG and OSP marine buffer zone on the Harbour Protective Provisions Plan; and

“WTG marine corridor” means a one nautical mile (1 nm) wide corridor of clear sea space between the Calder Platform and CPP1 edged in dark green and annotated and shown as the WTG marine corridor on the Harbour Protective Provisions Plan.

Restriction on authorised development

3. (1) No wind turbine generator, offshore substation platform or temporary surface infrastructure shall be erected in the pipeline and cable proximity area, the WTG and OSP marine buffer zone or the WTG marine corridor unless otherwise agreed in writing between the owner and the undertaker.
(2) In the case of temporary surface infrastructure, the owner may not unreasonably withhold consent where the undertaker has been reasonably requested to place temporary infrastructure in the pipeline and cable proximity area, the WTG and OSP marine buffer zone or the WTG marine corridor by a statutory consultee.
4. Prior to 1st January 2029, no wind turbine generator or offshore substation platform shall be erected in the WTG and OSP aviation buffer zone unless otherwise agreed in writing between the owner and the undertaker.
5. The restrictions in paragraphs 3 and 4 in the WTG and OSP aviation buffer zone, WTG and OSP marine buffer zone, and WTG marine corridor shall cease to have effect if the Secretary of State, having consulted with the owner, has confirmed in writing that the Calder Field Facilities have been decommissioned.

Coexistence agreement

6. Prior to the commencement of construction of the authorised development, the undertaker and the owner shall use reasonable endeavours to enter into a coexistence agreement (which includes provision for proximity agreements on standard UK oil and gas industry terms and arrangements for coordinating marine access and simultaneous operations).

Provision of information

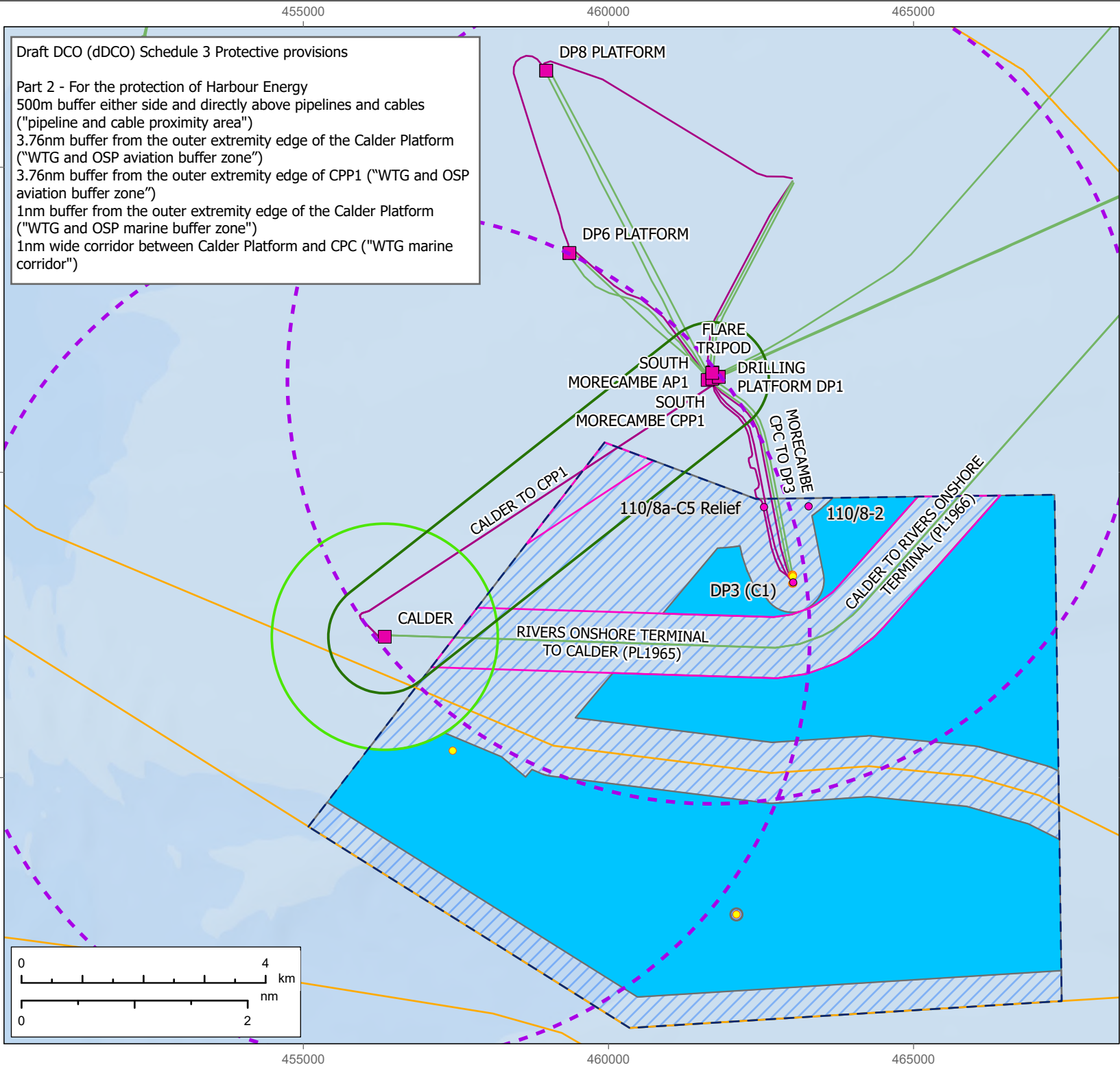
7. Without prejudice to any other rights or obligations under this Part of this Schedule the owner and the undertaker shall from time to time keep each other informed of relevant activities such that the owner and the undertaker may seek to agree solutions to allow those activities to successfully co-exist as far as reasonably practicable until completion of activities required under any statutory decommissioning plan required under the Petroleum Act 1998 in relation to the Calder Field Facilities.

Cooperation

8. The undertaker and the owner must each act in good faith and use reasonable endeavours to cooperate with, and provide assistance to, each other as may be required to give effect to the provisions of this Schedule.
9. Nothing in this Part of this Schedule shall affect any rights or obligations or assessment of compensation in accordance with the ministerial statement and any associated guidance.

Arbitration

- 10.** Any difference arising between the undertaker and the owner under this Part shall be referred to and settled by arbitration under article 15 (arbitration).



- LEGEND**
- Morecambe Offshore Windfarm site
 - Unconstrained area
 - Constrained area
 - WTG and OSP aviation buffer zone
 - WTG and OSP marine buffer zone
 - WTG Marine Corridor
 - Pipeline and cable proximity area
 - Wells
 - Spirit legacy and relief well locations
 - Platform
 - Pipelines & umbilicals
 - Power cable
 - Telecoms cable

Data:
NSTA, MMO
Esri, HERE, Garmin, USGS
Esri, HERE
OceanWise, Esri, Garmin, NaturalVue


PROJECT: MORECAMBE OFFSHORE WINDFARM:
GENERATION ASSETS

TITLE: Harbour Protective Provisions Plan

REV	DATE	COMMENTS	DRAWN	CHECKED
001	03/09/2025		SK	OG

ARCGIS REF: FLO_MOR_GIS_PRJ001_MOR_GenDCO_PP_Rev001
DRAWING: FLO-MOR-GIS-MAP037e-Protective Provisions-Rev001

SCALE:	PAGE SIZE:	COORDINATE SYSTEM:
1:85,000	A4	WGS 1984 UTM Zone 30N

 **MORECAMBE**